COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY

5961 South Mooney Boulevard
Visalia, CA 93277

Initial Study and Mitigated Negative Declaration
Mountain Road 109 White River Bridge Replacement Project

April 2021

Prepared By
Tulare County Resource Management Agency
Economic Development and Planning Branch
Environmental Planning Division

INITIAL STUDY CHECKLIST

1. **Project Title:** Mountain Road 109 White River Bridge Replacement Project

2. **Lead Agency:** County of Tulare
Resource Management Agency
5961 S. Mooney Blvd.
Visalia, CA 93277

3. **Contact Persons:** Jason Vivian, Project Manager (Project Planner) – 559-624-7135
jvivian@tularecounty.ca.gov

Hector Guerra, Chief, Environmental Planning Division – 559-624-7121

4. **Project Location:** The bridge is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California (Figure 1. Project Vicinity; Figure 2. Project Location). The site is located within the United States Geological Survey (USGS) White River 7.5 Minute Quadrangle. It lies within the Northly Portion of Section 28 South, Township 24 South, Range 29 East, MDB&M within APN 344-03-004.

5. **Project sponsor's name and address:**

Tulare County, Resource Management Agency
5961 S. Mooney Boulevard
Visalia, California 93227-9374

6. **General Plan Designation:** Foothill Agriculture.

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

8. **Description of Project (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)** The Build Alternative would replace the existing M109 bridge crossing over White River with a new two-lane bridge structure to match the required minimum width to carry two lanes of traffic. The approximate limits of the Project are approximately 500 feet northwest and 300 feet southeast of the existing M109 crossing of White River. The Project would conform to the existing roadway width and would provide an improved road alignment for safety. The bridge structure would consist of a concrete slab bridge. The proposed bridge would be approximately 100 feet long and would be no greater than 18 feet in height when measured from the creek bottom.

The White River channel would be graded to restore natural channel contours. Rock slope protection may be necessary around the bridge abutments for scour protection.

Temporary construction easements would be needed for bridge construction and construction staging areas. Permanent slope easements may be required to conform the finished grades of the maintenance roads along each side of the creek to the bridge profile grade. Right-of-way acquisition and utility relocations are anticipated.

M109 and driveway access would remain open during construction. Due to the length of a potential detour route, stage construction would be utilized in order to keep the roadway open to traffic during construction. Construction is anticipated to begin in 2024 and would take approximately 12 months to complete.

9. **Surrounding land uses and setting (Brief description):** Areas to the northwest, north, northeast, and east are devoid of any structures, are hilly, and generally includes blue oak and foothill pine woodlands, chaparral, and serpentine habitats. One rural residence (and auxiliary structures) are immediately west/southwest of the existing bridge. Land use within the Project area is designated as Foothill Agriculture. According to the Natural Environmental Study (Minimal Impact; NESMI), the Biological Study Assessment (BSA), the Project area is composed of five different land cover types – urban/barren, annual grassland, riparian woodland, seasonal wetland, and riverine. The area is disturbed in some locations, particularly the urban/barren areas and within sections of the annual grassland that are currently used for livestock grazing. The riparian, wetland, and riverine habitats are relatively undisturbed and support native plant and local wildlife species. The average elevation within the Area of Potential Effect (APE) is approximately 1,100 feet above mean sea level.

10. **Other public agencies whose approval is, or may be, required (e.g., permits, financing approval, or participation agreement):** Regional Water Quality Control Board, California Department of Fish and Wildlife, San Joaquin Valley Unified Air Pollution Control District, Caltrans, other TBD.

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that include, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?** Pursuant to AB 52, a Sacred Land File request was submitted to the Native American Heritage Commission on January 25, 2021 and was returned with negative results. On February 23, 2021, tribal consultation notices were sent to sixteen (16) tribal contacts representing seven (7) Native American tribes. The County received no responses from the tribes within the 30-day response time. Mitigation measures have been included in the project to reduce potential impacts on tribal cultural resources in the unlikely event that any are unearthed during construction-related activities.

Figure 1. Vicinity Map

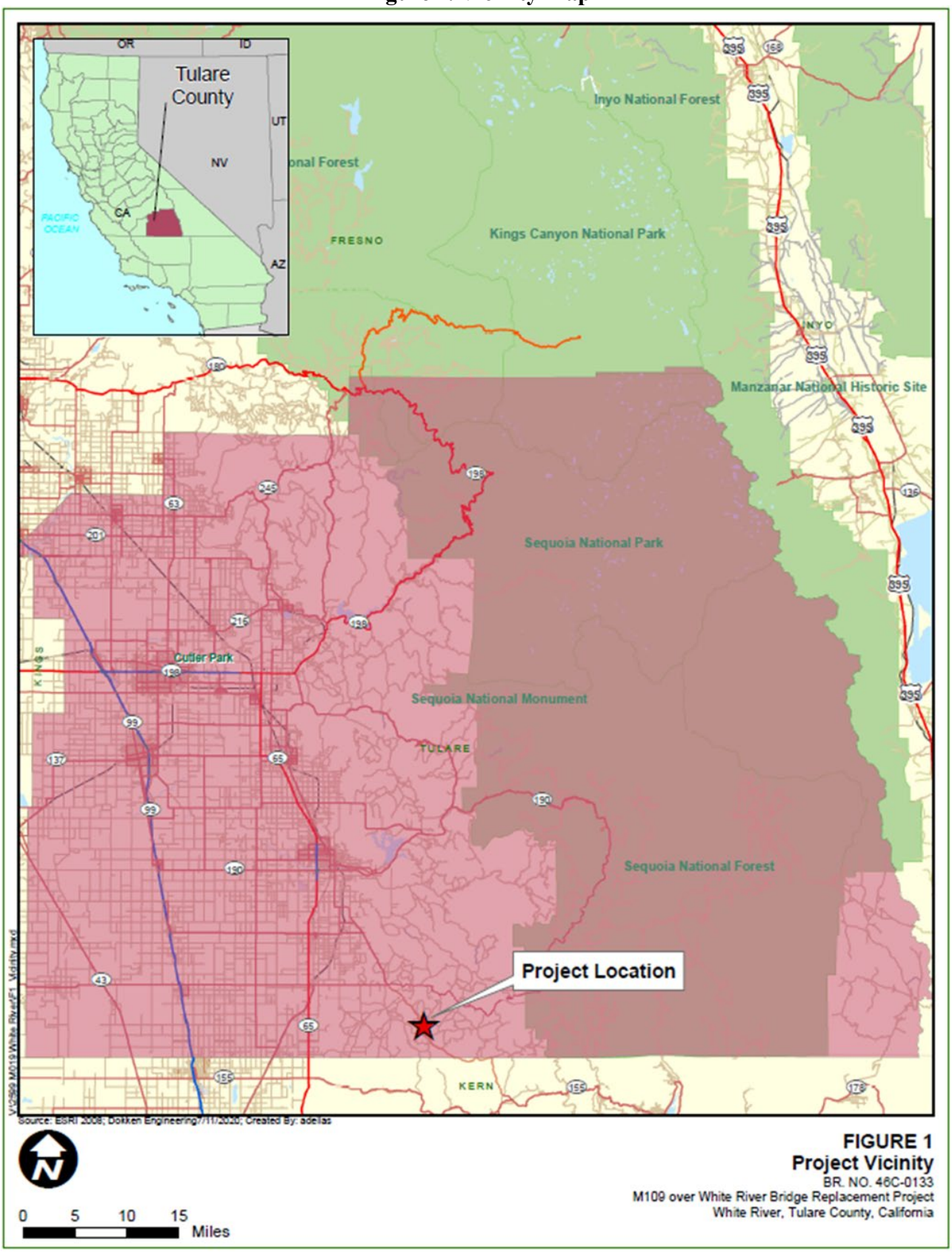


Figure 2. Aerial View of Site

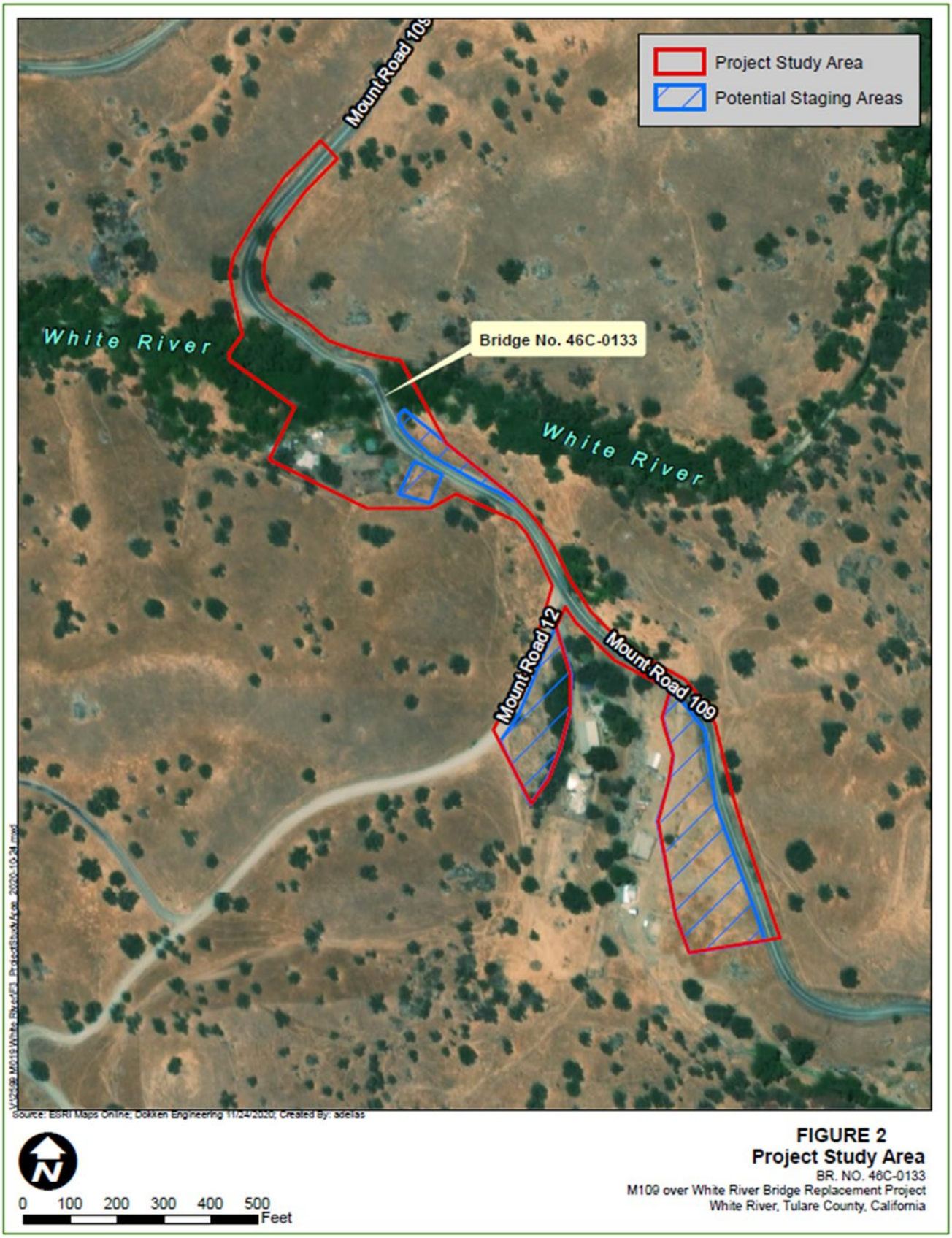


Figure 3. Project Location (Topographic)

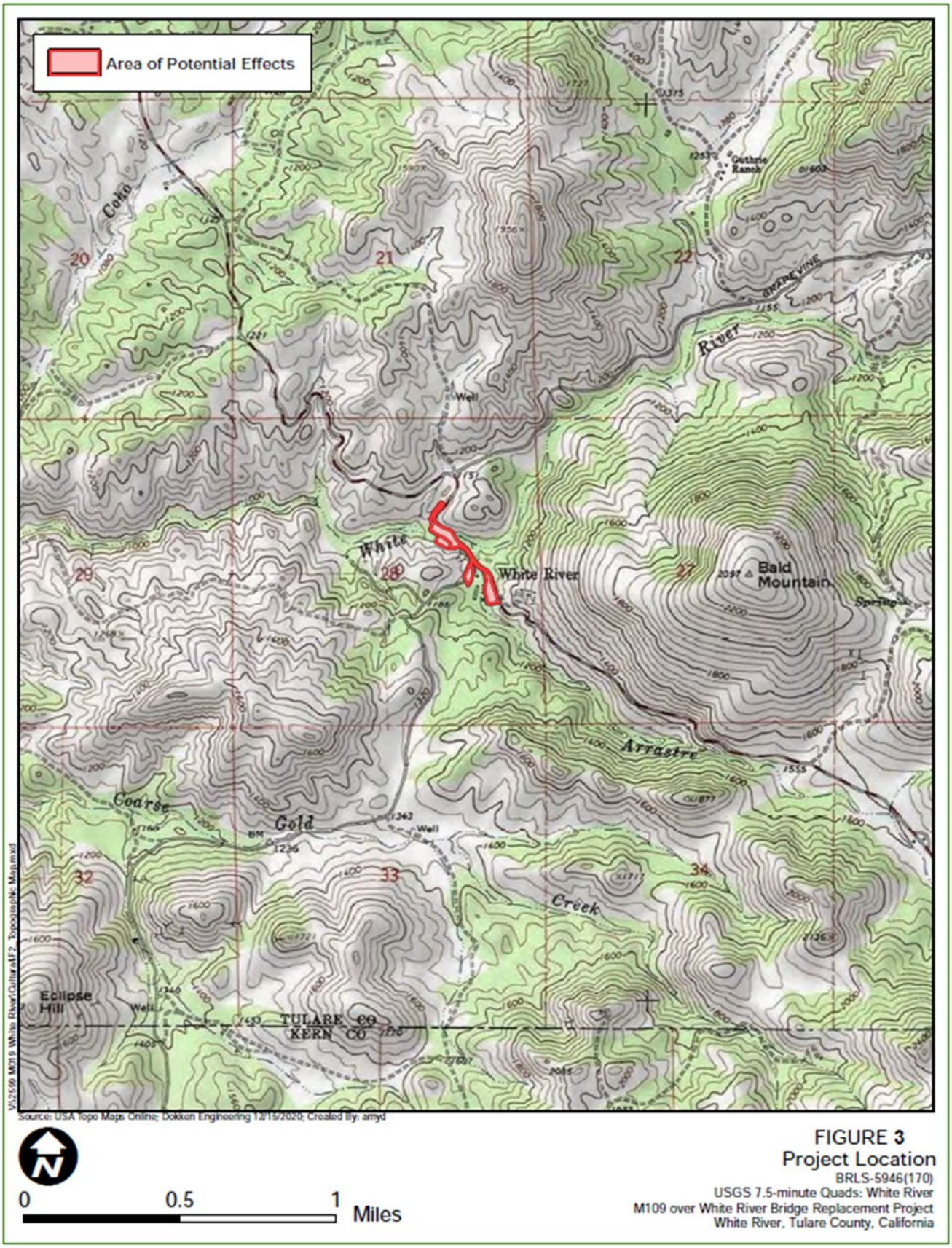
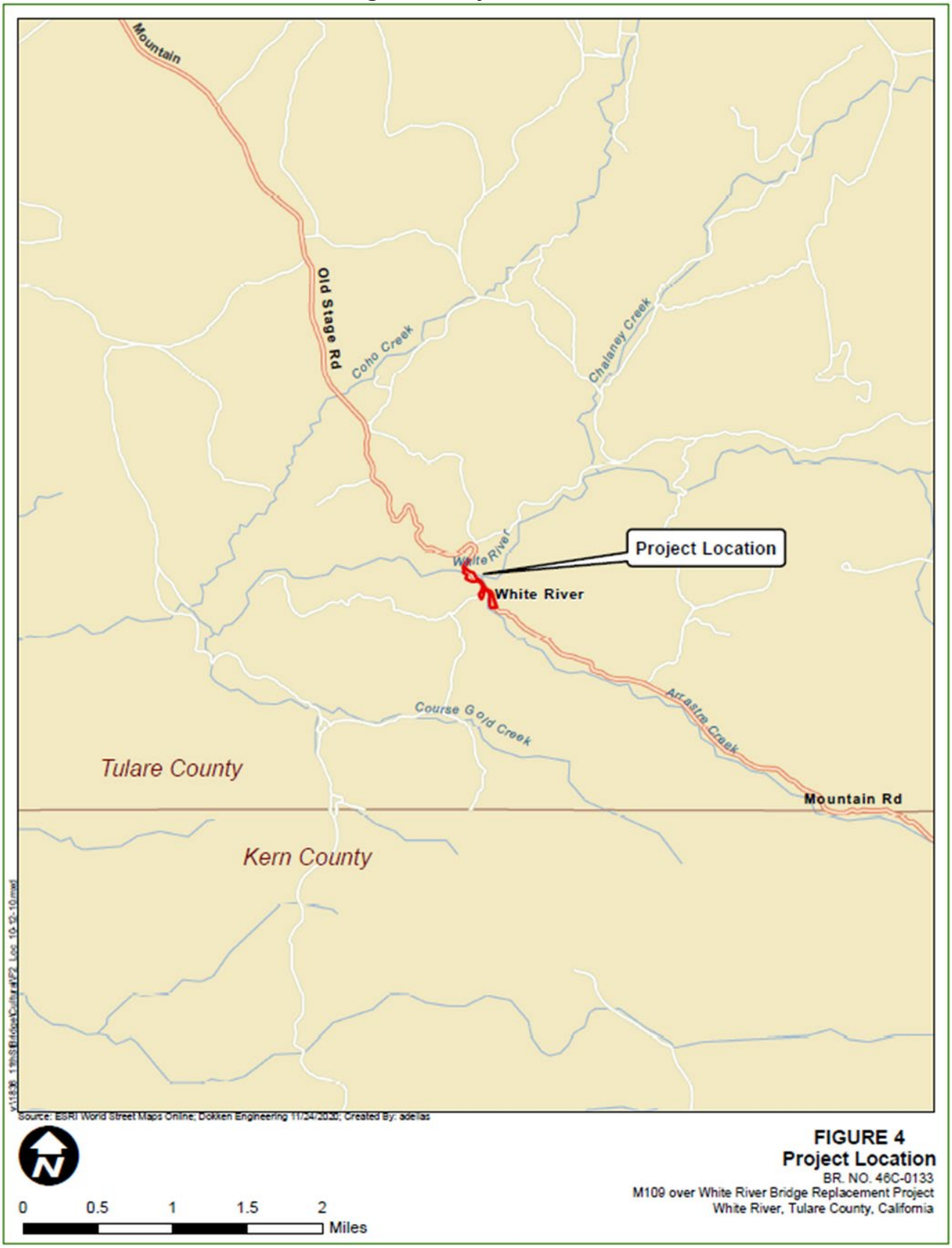


Figure 4. Project Location



ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

A. 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	☐ Agriculture / Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology / Soils	☐ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials
☒ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☒ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☒ Transportation	☒ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

B. 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 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.

Signature: _____ Date: 5/11/21

Hector Guerra — Chief Environmental Planner
Printed Name — Title

Signature: _____ Date: 5.11.21

Reed Schenke, P.E. — Environmental Assessment Officer

C. EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

1.	AESTHETICS				
Would the project:		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☒	☐	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Project Impact Analysis:

a-d) No- to Less than Significant Impact: The project would have a less than a significant impact on a scenic vista. As discussed in the Tulare County General Plan, while SR-198 and SR-190 are considered candidate state scenic highway, Mountain Road 109 (M109) is designated as a County scenic route. The Project site is approximately 0.1 mile north of the intersection of M 109 and M12. "The White River Bridge (Bridge No. 46C-0133) over White River is not eligible for listing on the National Register of Historic Places (NRHP). No designated scenic vistas are at or near the Project site. M109 is not a designated Scenic Highway in the National Scenic Byways Program nor is it a State Scenic Highway. There are no Wild and Scenic Rivers within the proposed Project corridor."[1]

"An area of riparian woodland vegetation is found within the proposed Project area. This area is comprised of native and non-native vegetation including willows (Salix spp.), California buckeye (Aesculus californica), California sycamore (Platanus racemosa), elderberry (Sambucus sp.) and stinging nettle (Urtica dioica). While some riparian habitat would be removed, this would not substantially change the visual quality of the site. As a wooded area, numerous trees would remain in view of the replacement bridge, and, to the extent possible, all trees along the edge of construction would be trimmed rather than removed. All temporary impacts to riparian areas would be re-contoured to pre-construction conditions and re-vegetated with a native seed mix. Permanent impacts will be mitigated through an agency approved mitigation ratio at an on or off-site agency approved location or a combination of both. No new lighting is proposed."[2]

Mitigation Measures: Identical to **BIO-4** and **BIO-15**.

Conclusion: The project will result in **No- to Less Than Significant Impact with Mitigation**. Importantly, the Project will also replace a functionally obsolete one-lane bridge with a new two-lane bridge thereby significantly increasing safety and functionality.

Measures BIO-4 & **BIO-15** will be implemented to minimize potential impacts.

BIO-4: All temporarily effected construction areas must be re-contoured to preconstruction conditions. All natural areas will be seeded with a certified weed free regionally suitable, biologist approved native seed mix.

BIO-15: Prior to arrival at the project site and prior to leaving the project site, construction equipment that may contain invasive plants and/or seeds must be cleaned to reduce the spreading of noxious weeds

Cumulative Impact Analysis:

[1] Visual Impact Assessment Memorandum. February 2021. Page 2. Prepared by Dokken Engineering and included as Attachment "A" in this MND.

[2] Ibid. Pages 4 & 5.

No Impact: The Project's remote location and public benefits (i.e., replacing a functionally obsolete one-lane bridge with a new two-lane bridge and increasing public safety), and as it is included in Tulare County Association of Governments (TCAG) 2018/19-2023/24 Federal Transportation Improvement Program (FTIP) for bridge replacement projects, the Project would provide a beneficial impact to the roads/bridges system and safety to users of the bridge.

2. AGRICULTURAL AND FOREST RESOURCES

	In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the Rural Valley Lands Plan point evaluation system prepared by the County of Tulare as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b)	Conflict with existing zoning for agriculture use, or a Williamson Act contract?	☐	☐	☐	☒
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources code 12220(g), timberland (as defined in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Project Impact Analysis:

a, b) No Impact. Farmland and Williamson Act – No Prime Farmland, Unique Farmland, or Farmland of Statewide Local importance are within the project area (California Department of Conservation, 2016).[3] The Project site is adjacent to Williamson Act lands; however, it will not cause any conflicts with existing zoning or Willison Act contracts. No Farmland conversion will occur as a result of the Project.

Mitigation Measures: None required.

Conclusion: The project will result in **No Impact**. Importantly, the Project will also replace a functionally obsolete one-lane bridge with a new two-lane bridge thereby significantly increasing safety and functionality.

c) No Impact. Zoning of forest land or timberland – The Project site is not in an area zoned for forest land, timberland, or timberland zoned Timberland Production. The project site is located in an area designated for Foothill Agriculture land uses (Tulare County

[3] Department of Conservation. California Important Farmland Finder, DLRP Important Farmland Finder (ca.gov). Accessed 4/21/21.

General Plan, 2012). The Project would have no conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. As such, the Project would result in no impact to this resource

Mitigation Measures: None are required.

Conclusion: No Impact.

d) No Impact: Loss of or conversion of forest land – The Project site is zoned Foothill Agriculture and is not located within designated forest land. The Project is greater than eight (8) miles southwest of the Sequoia National Forest. The Project would not result in the loss of forest land or conversion of forest land to non-forest use.

Mitigation Measures: None are required.

Conclusion: No Impact.

e) No Impact: Other changes resulting in conversion of farmland or forestland – The Project site is zoned Foothill Agriculture and is not located within designated forest land. The nearest forest land is the Sequoia National Forest which is greater than 8 miles to the northeast. Additionally, the site is within a rural urbanized area and no forest land or farmland will be affected by the development of this project.

Mitigation Measures: None are required.

Conclusion: No Impact.

Cumulative Impact Analysis:

No Impact: The Project will not result in the loss of Williamson Act lands nor will it conflict forest land, timberland, or timberland zoned Timberland Production. The Project's remote location and public benefits (i.e., replacing a functionally obsolete one-lane bridge with a new two-lane bridge and increasing public safety), and as noted earlier, it is included in TCAG's RTP and FTIP for bridge replacement projects, the Project would provide a beneficial impact to the roads/bridges system and safety to users of the bridge.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b)	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?	☐	☐	☒	☐
c)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
d)	Result is other emissions (such as those leading to odors adversely affecting a substantial number of people?	☐	☐	☐	☒

Project Impact Analysis:

a) Less Than Significant: Air Quality Plans – The proposed Project is located within the San Joaquin Valley Air Basin in the region administered by the San Joaquin Valley Air Pollution Control District (SJVAPCD or Air District). To meet Federal Clean Air Act (CAA) requirements, the SJVAPCD has adopted multiple air quality attainment plan (AQAP) documents, including the following:

- 2004 Revision to the California State Implementation Plan for Carbon Monoxide;

- 2004 Extreme Ozone Attainment Demonstration Plan (for attainment of the 1979 1-hour ozone standard);
- 2007 Ozone Plan (for attainment of the 1997 8-hour ozone standard);
- 2007 PM10 Maintenance Plan and Request for Redesignation;
- 2008 PM2.5 Plan (for the 1997 annual standard);
- 2012 PM2.5 Plan (for the 2006 24-hour standard);
- 2013 Plan for the Revoked 1-Hour Ozone Standard;
- 2015 Plan for the 1997 PM2.5 Standard (for annual and 24-hour standards);
- 2016 Plan for the 2008 8-Hour Ozone Standard;
- 2016 Moderate Area Plan for the 2012 PM2.5 Standard (for annual standard); and
- 2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards (for annual and 24-hour standards).

As shown in **Table AQ-1**, the SJVAB is considered to be in attainment for federal and state air quality standards for carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2); attainment for federal and non-attainment for state air quality standards for respirable particulate matter (PM_{10}); and non-attainment of state and federal air quality standards for ozone (O_3) and fine particulate matter ($PM_{2.5}$).

Table AQ-1: Project Area Attainment Status

Criteria Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone – 1-Hour	N/A	Nonattainment/Severe
Ozone – 8-Hour	Nonattainment/Extreme	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead	No Designation/Classification	Attainment
Hydrogen Sulfide	N/A	Unclassified
Sulfates	N/A	Attainment
Visibility Reducing Particles	N/A	Unclassified
Vinyl Chloride	N/A	Attainment

Source: SJVAPCD, http://www.valleyair.org/aqinfo/attainment.htm.

The Project is listed in the Tulare County Association of Governments (TCAG) 2020/2021-2023/24 Federal Transportation Improvement Program (FTIP). In the FTIP, the project identification number is HBP-ID 4429 and the Project description is as follows:

"BRIDGE NO. 46C-0133, MOUNTAIN 109, OVER WHITE RIVER, 8 MI SE FOUNTAIN SPRINGS. Replace 1 Lane Bridge with 2 Lane Bridge. No added lane capacity."[4]

No operational long-term changes to air quality from the project would result because traffic volumes would not be affected (i.e., increased nor decreased). The Project will result in striping of two formalized lanes on the bridge and long-term traffic volumes would not be affected because the bridge connects to an existing two-lane road (one lane each direction). Under transportation conformity requirements, the Project is exempt from the requirement that a conformity determination be made because it consists of "Widening narrow pavements or reconstructing bridges (no additional travel lanes)," under 40 CFR 91.127 Table 3.

To be consistent with the applicable air quality plans for temporary construction impacts, the Project would implement construction- and demolition-related emissions reduction measures. Specifically, the Project will implement and comply with the Air District's Regulation VIII (Fugitive Dust Prohibitions) requirements to control fugitive dust emissions during construction- and demolition-related activities, and reduce the potential for significant PM_{10} impacts.

PM_{10} would be generated by the project construction-related activities which will include earth-disturbing activities. The SJVAPCD indicates that specific control measures in Regulation VIII may be required for construction sites by regulation.

[4] TCAG, https://tularecog.org/sites/tcag/assets/File/Final%202021%20FTIP.pdf

SJVAPCD's Guide for Assessing and Mitigating Air Quality Impacts lists additional measures that may be required for very large projects or projects near sensitive receptors.[5]

Mitigation Measures: None Required. The Project will be required to comply with applicable Air District rules/regulations such as Regulation VIII, Rule 9510 (Indirect Source Review), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

Conclusion: Less Than Significant.

b) Less Than Significant. Cumulatively Considerable Net Increase of Non-Attainment Criteria Pollutants – The Project would not violate any air quality standards or contribute to an existing or project air quality violation. While the Project is located in a non- attainment area for ozone and $PM_{2.5}$ under the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS), long-term operational emissions would not be affected since the Project does not increase capacity and is consistent with the exemption from transportation air quality conformity requirements as demonstrated in response "3. a."

Short-term, intermittent, and temporary construction-related emissions would result in some amount of dust emissions and would have a potential to affect PM. Construction emission estimates from a similar project (Deep Creek Bridge Replacement, which consisted of a 100-foot-long concrete slab bridge) are used in this document by analogy as similar projects will likely result in similar emissions. As summarized in **Table AQ-2**, the Project does not exceed the CEQA thresholds established by the SJVAPCD.

TABLE AQ-2
PROJECT CONSTRUCTION EMISSIONS ESTIMATES

Activity	Estimated Criteria Pollutant Emissions (tons per year)				Greenhouse Gas Emissions (metric tons per year)
	ROG	NOx	PM_{10}	$PM_{2.5}$	$MTCO_2$
Bridge Replacement	0.2	2.0	0.1	0.1	200
Roadway Approaches	0.2	1.9	0.2	0.1	184
Project Total	**0.4**	**3.9**	**0.3**	**0.2**	384
SJVAPCD Thresholds	10	10	15	15	**n/a**
Threshold Exceeded	No	No	No	No	n/a
Source: Deep Creek Bridge Replacement Project					

Mitigation Measures: None Required. However, emission reduction practices, specifications, rules, regulations, prohibitions, etc. shall be as part of the Project to minimize short-term, intermittent, temporary construction- and demolition-related activities which may result in air quality emissions such as Caltrans' Standard Specifications Section 14-9.03 Dust Control of Caltrans' Standard Specifications (2010); Section 7-1.02 Emissions Reduction and Section 18 Dust Palliative of Caltrans' Standard Specifications (2010) or San Joaquin Valley Unified Air Pollution Control District Rules/Regulations (i.e., Regulation VIII-Fugitive Dust Prohibitions), whichever is more stringent. Also, Wind Erosion Control BMP (WE-1) from Caltrans' Construction Site Best Management Practices Manual (Caltrans 2003) will be implemented as follows:

- Water shall be applied by means of pressure-type distributors or pipelines equipped with a spray system or hoses and nozzles that will ensure even distribution.
- All distribution equipment shall be equipped with a positive means of shutoff.
- Unless water is applied by means of pipelines, at least one mobile unit shall be available at all times to apply water or dust palliative to the project.
- If reclaimed water is used, the sources and discharge must meet California Department of Health Services water reclamation criteria and the Regional Water Quality Control Board requirements. Non-potable water shall not be conveyed in tanks or drain pipes that will be used to convey potable water and there shall be no connection between potable and non- potable supplies. Non-potable tanks, pipes and other conveyances shall be marked "NON- POTABLE WATER – DO NOT DRINK."
- Materials applied as temporary soil stabilizers and soil binders will also provide wind erosion control benefits.

[5] SJVAPCD, https://www.valleyair.org/transportation/GAMAQI.pdf.

Pursuant to SJVAPCD Rule 9510, an Indirect Source Review will be coordinated with the SJVAPCD during Final Design.

To reduce fugitive dust emissions the construction contractor will adhere to applicable Air District rules and regulations such as the requirements of SJVAPCD Rule 8021-Construction, Demolition, Excavation, Extraction, And Other Earthmoving Activities. As such, this will include the submittal of a Dust Control Plan to the Air District as described in Rule 8021. The following are control measure options:

- A1 Pre-water site sufficient to limit Visible Dust Emissions (VDE) to 20% opacity, and
- A2 Phase work to reduce the amount of disturbed surface area at any one time.
- B1 Apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity; or
- 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.
- C1 Restrict vehicular access to the area; and
- 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 in section 3.58 of Rule 8011.

Conclusion: Less Than Significant. The Project would have a cumulatively significant considerable net increase in criteria pollutants if Project-specific increases would exceed the Air District's significance thresholds. As demonstrated in Table AQ-2, Project-specific emissions would not exceed the Air District's thresholds. As Project-specific impacts are Less Than Significant, the Project's cumulative impacts are also **Less Than Significant**.

c). No Impact: Substantial pollutant concentrations are not anticipated.

As documented in the 2021 Hazardous Initial Site Assessment, "Naturally Occurring Asbestos (NOA) occurs randomly throughout Northern California in rocks and soil because of natural geological processes. Natural weathering or construction activities can disturb soil or rock that contains NOA and release the fibers into the air potentially affecting pedestrians and workers in the area. Per the Naturally Occurring Asbestos Hazard map, the M109 White River Bridge Replacement location is less likely to contain NOA, however small bodies of rock or soil with moderate or higher likelihood of asbestos presence can exist. Criteria for construction safety practices regarding NOA can be found in CCR, Title 8, Section 5208. [6]

During construction- and demolition-related activities, short-term, intermittent, and temporary degradation of air quality may occur due to the release of particulate emissions (airborne dust also referred to as PM10) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment also are anticipated and could include carbon monoxide (CO), nitrogen oxides (NOx), volatile organic compounds (VOCs), directly-emitted particulate matter (PM_{10} and $PM_{2.5}$), and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NOx and VOCs in the presence of sunlight and heat. As shown in **Table AQ-2**, construction emissions were calculated to be below that of SJVAPCD significance thresholds.

Heavy-duty trucks and construction-related equipment powered by gasoline and diesel engines would generate CO, SO_2, NOx, VOCs and some particulate matter in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be short- term temporary and limited to the immediate area surrounding the construction site.

Dust generated would result in a short-term, temporary, and local impact limited to areas of construction. Dust control practices sufficient to comply with Air District emission limitations would be incorporated into the project to minimize this potential impact.

There are no sensitive receptors in the Project area which would be affected. Each of the above impacts results from construction- and demolition-related activities which will be short-term, intermittent, and temporary (i.e., completed within 6-12 months). With inclusion of air quality BMPs, as stated earlier, these impacts would be further minimized.

[6] Hazardous Waste Initial Site Assessment. M109 White River Bridge Replacement Project. January 2021. Page 17. Included in Attachment "D" of this MND.

Mitigation Measures: None Required. The Project will be required to comply with applicable Air District rules/regulations such as Regulation VII, Rule 9510 (Indirect Source Review), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

Conclusion: No Impact.

d) No Impact. Other Emissions (including odors) – There are no sensitive receptors which would be affected. Also, as noted earlier, Project-related activities will be short-term, intermittent, and temporary (that is, completed within a 6-12 month timeframe).

Mitigation Measures: None Required. The Project will be required to comply with applicable Air District rules/regulations such as Regulation VIII, Rule 9510 (Indirect Source Review), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

Conclusion: No Impact.

Cumulative Impact Analysis:

No-to Less Than Significant Impact: The Project is located in a remote area away from potential sensitive receptors. It will result in short-term, intermittent and temporary emissions as the Project will be completed within 6-12 months. And, as noted earlier, it is included in Tulare County Association of Governments (TCAG) 2020/2021-2023/24 Federal Transportation Improvement Program (FTIP). Lastly, the Project would result in a public benefit as it replace a single-lane functionally obsolete bridge with a new, two-lane bridge that will also improve safety to vehicles travelling along M109.

4. BIOLOGICAL RESOURCES

Would the project:		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
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, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation	☐	☐	☒	☐

	Plan, or other approved local, regional, or state habitat conservation plan?				

Project Impact Analysis:

Study Methods: Dokken Engineering biologists conducted the following literature searches for the project: On November 3, 2020, species lists were obtained from U.S. Fish and Wildlife Service (USFWS) IPaC, California Department of Fish and Wildlife (CDFW)'s California Natural Diversity Database (CNDDB), and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants. The USFWS IPaC list was obtained using a shapefile of the Project impact area. The CNDDB and CNPS lists were obtained with a nine-quadrangle search of the USGS 7.5' quadrangles California Hot Springs (3511886), Gibbon Peak (3511887), Fountain Springs (3511888), Posey (3511876), White River (3511877), Quincy School (3511878), Glennville (3511866), Woody (3511867), and Sand Canyon (3511868). [7]

"On April 1, 2020, April 23, 2020, and May 14, 2020, Dokken Engineering biologist Andrew Dellas conducted general biological surveys, wetland delineations, and protocol special status plant surveys. General biological surveys and protocol special status plant surveys were conducted by walking meandering transects throughout the entire Project impact area plus a 50 to 100-foot buffer where accessible, henceforth referred to as the Project Biological Study Area (BSA). The surveying biologist noted all plant and wildlife species observed, habitat types, and any potential special status species within the area. Any potential special status plant species were assessed using a dichotomous key. In addition, a preliminary jurisdictional delineation (PJD) was conducted in accordance with A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual (USACE 2008a), and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008b). Delineation of the OHWM of the White River channel, associated wetlands, and associated riparian habitat was completed with the use of USACE delineation manuals, aerial photography, and field observations. Observed OHWM, and wetland features were mapped in the field with a R1 GNSS Receiver and ArcGIS software." [8]

Setting

The Project is located in the foothills of the southern Sierra Nevada, within the southern Sierra Nevada Foothills Jepson geographic subdivision. Land use within the Project area is designated as Foothill Agriculture.[9] The Biological Study Area (BSA) is composed of five different land cover types as described below:

"Urban/Barren

Urban and barren land within the BSA consists of roadways, road shoulders, man-made structures, and all other land which has been heavily disturbed by human activity within the Project area. Much of the southeastern section of the Project area is composed of urban/barren land due to activity on the residential property in the area, including livestock grazing. Vegetation in this land cover type is either highly disturbed, ornamental, or nonexistent. Within the Project impact area, urban/barren land makes up approximately 4.44 acres (~65%).

Annual Grassland

Annual grassland within the BSA is largely composed of non-native and invasive grass species, including compact brome (*Bromus madritensis*), foxtail barley (*Hordeum murinum*), ripgut brome (*B. diandrus*), and soft chess brome (*B. hordeaceus*). These species are common dominants in non-native annual grasslands across California. This community also contains scattered oak trees (*Quercus spp.*) throughout, as the area transitions to native oak savanna habitat outside of the BSA. In addition, a number of flowering herbs are found throughout this annual grassland. Species include lupins (*Lupinus spp.*), Queen Anne's lace (*Daucus carota*), rusty popcornflower (*Plagiobothrys nothofulvus*), and bristly fiddleneck (*Amsinckia tessellata*). Many of these forbs are native, in contrast with the invasive grass species that dominate the landscape. A portion of the annual grassland within the BSA is disturbed by urban structures and grazing activity. Within the Project impact area, annual grassland makes up approximately 1.45 acres (~21%).

Riparian Woodland

[7] Natural Environment Study (Minimal Impacts). February 2021. Page 8. Prepared by Dokken Engineering and included in Attachment "B" of this MND.
[8] Ibid
[9] Op Cit. Page 10.

Riparian woodland is found within the BSA along the White River channel. This riparian corridor is densely vegetated, with the canopy dominated by trees such as willows (*Salix spp.*), California buckeye (*Aesculus californica*), and California sycamore (*Platanus racemosa*). The understory is composed of mostly native shrubs and herbs, including elderberry (*Sambucus sp.*) and stinging nettle (*Urtica dioica*). Within the Project impact area, riparian woodland makes up approximately 0.73 acres (~11%).

Seasonal Wetland

Seasonal wetland habitat occurs in a small area immediately adjacent to the White River channel just west of the existing M109 bridge. This habitat is composed of wetland plant species such as spike rush (*Eleocharis sp.)* and water smartweed (*Persicaria amphibia*). Some of these species mix into riverine habitat due to their affinity for inundated habitats and the seasonality of the river channel. Within the Project impact area, seasonal wetland makes up approximately 0.02 acres (<1%).

Riverine

In the BSA, riverine habitat occurs within the OHWM of the White River channel. The riverine channel is sandy and shallow, and water flows seasonally. When the channel is wetted, aquatic species such as water smartweed and blue water-speedwell (*Veronica anagallis-aquatica*) grow within and along the edges of the channel. The channel is shaded by the existing bridge on M109 and the tall canopy of the riparian woodland. Within the Project impact area, riverine habitat makes up approximately 0.18 acres (~3%).

Wildlife

Wildlife species observed within the BSA during biological surveys includes common bird, mammal, and reptile species found across California. The riparian and grassland habitats within the BSA are suitable for a variety of wildlife species, providing appropriate cover, as well as nesting and foraging habitat. Species common of the area include western bluebird (*Sialia mexicana*), gopher snake (*Pituophis catenifer*), coyote (*Canis latrans*), and California toad (*Anaxyrus boreas halophilus*) (iNaturalist 2020). White River is shallow and seasonal; therefore, it is unlikely to support regular populations of fish and other aquatic wildlife species which would require permanent sources of surface water. Table 2 lists the wildlife species observed within the BSA during April 1, April 23, and May 14, 2020 survey efforts."[10]

a) Less Than Significant Impact with Mitigation: Special Status Species – As documented in the Natural Environment Study (Minimal Impacts) [NESMI]for this project, one special status wildlife species has the potential to occur within the BSA: Crotch bumble bee (*Bombus crotchii*). In addition, native birds, protected under the Migratory Bird Treaty Act (MBTA) and similar provisions under California Fish and Game code, currently nest or have the potential to nest within the BSA. During the biological surveys, habitat for nesting birds was identified within the BSA, including the riparian vegetation along White River and scattered tree habitat within the BSA.[11]

Wildlife Species

"The Crotch bumble bee is a candidate for listing as "endangered" under the California Endangered Species Act (CESA). No Crotch bumble bee was observed during the April 2020 and May 2020 biological surveys. However, database searches, literature review, and habitat assessments suggest that the Crotch bumble bee has a low to moderate potential to occur within the BSA."[12]

Project Impacts to Crotch Bumble Bee

"While the Crotch bumble bee was determined to have a low to moderate potential to occur within the BSA, it is more likely to occur in the less disturbed hillsides and open areas outside of the immediate Project impact area. With the implementation of Project avoidance and minimization measure **BIO-10**, the Project will not result in the take of Crotch bumble bee.

BIO-10: Prior to construction-related activities, a reconnaissance level survey will be conducted by the Project biologist to detect the Crotch bumble bee if it is present within the BSA. The survey will be conducted in the springtime, during peak blooming season, when the Crotch bumble bee is more likely to be encountered. High definition cameras will be utilized during survey efforts to capture unique physical characteristics of each bee species encountered. Photos will be submitted to online databases that employ bee experts, such as Bumble Bee Watch or Bee Spotters, as suggested in the Survey Protocols

[10] Op. Cit. 16.
[11] Op Cit. 5.
[12] Op Cit. 42.

for the Rusty Patched Bumble Bee. If the Crotch bumble bee is presumed present within the BSA, additional coordination with CDFW will occur to determine appropriate measures to avoid impacts to the special-status bee species."[13]

Plant Species

"After protocol special status plant surveys, habitat assessment, and literature review, all special status plant species are presumed absent from the BSA."[14]

Mitigation Measures: Implementation of **BIO-10**.

Conclusion: Less Than Significant Impact with Mitigation.

b) Less Than Significant Impact with Mitigation: Sensitive Natural Communities – "The Project would have temporary and permanent impacts to sensitive natural communities within the Project impact area. Due to the construction of a new bridge and new approach roadways, the Project would permanently impact approximately 0.074 acres of White River, 0.0002 acres of wetland habitat, and 0.106 acres of riparian woodland. In addition, the Project would temporarily impact approximately 0.048 acres of White River, 0.014 acres of seasonal wetland, and 0.226 acres of riparian woodland." [15] Within the BSA, White River, seasonal wetland, and riparian woodland are identified as natural communities of special concern. White River and seasonal wetlands are jurisdictional waters of the U.S. and State under the jurisdiction of the USACE and the Central Valley RWQCB, and riparian woodland is a jurisdictional habitat under CDFW. [16] Mitigation measures **BIO-1** through **BIO-9** would lessen potential impacts to riparian habitat within the Project area to less than significant.

Mitigation Measures: See **BIO-1** through **BIO-9**.

Conclusion: **Less Than Significant Impact with Mitigation**.

c) Less Than Significant Impact with Mitigation. Wetlands – "Approximately 0.02 acres of seasonal wetland occurs along either bank of the White River just west of the existing M109 bridge."[17] Temporary and permanent impacts to seasonal wetland are anticipated to occur due to construction of the new bridge, which would occur directly above the small area of existing seasonal wetland within the Project impact area. Approximately <0.001 acres of seasonal wetland would be permanently impacted due to the placement of new bridge footing, and these permanent effects are considered negligible. Approximately 0.014 acres of seasonal wetland would be temporarily impacted during construction due to access and proximity to active construction areas.[18]" Mitigation measures **BIO-1** through **BIO-9** would be incorporated to mitigate impacts to seasonal wetland habitat.[19]

Mitigation Measures: To further avoid and minimize potential project effects, **Mitigation Measures BIO-1** through **BIO-9** would be implemented.

Conclusion: Than Significant Impact with Mitigation.

d) Less Than Significant Impact: Interference with the movement of wildlife – There proposed Project is outside of the National Marine Fisheries Service (NMFS) Essential Fish Habitat (EFH) and will not interfere substantially with the movement of any native resident or migratory fish. The proposed Project will have a less than significant impact on this resource.

Mitigation Measures: None required.

Conclusion: **Less Than Significant Impact.**

e) Less Than Significant Impact: Local Policies – The proposed Project will comply with all local, County, and State policies and will not cause any conflicts with them.

[13] Op Cit.
[14] Op Cit. 41.
[15] Op Cit. iv.
[16] Op Cit. 35.
[17] Op Cit. 40.
[18] Op. Cit.
[19] Op Cit.

Mitigation Measures: None required.

Conclusion: **Less Than Significant Impact**.

f) Less Than Significant Impact: Conservation Plans – The proposed Project will comply with all local, County, and State policies and will not cause any conflicts with them.

Mitigation Measures: None required.

Conclusion: **Less Than Significant Impact**.

Project Mitigation Measures: The following Mitigation Measures (**BIO-1** through **BIO-16**) would be implemented as part of the project to minimize project effects to biological resources:

BIO-1: Contract specifications will include the following BMPs, where applicable, to reduce erosion during construction:

- Implementation of the project will require approval of a site-specific Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Plan (WPCP [if ground disturbance is less than 1 acre]) that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;
- Existing vegetation would be protected where feasible to provide an effective form of erosion and sediment control;
- Exposed soils would be covered by loose bulk materials or other materials to reduce erosion and runoff during rainfall events.
- Exposed soils would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction-related activities such as traffic and grading activities.
- All concrete curing activities would be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly.
- All construction-related materials, vehicles, stockpiles, and staging areas would be situated outside of the stream channel as feasible. All stockpiles would be covered, as feasible.
- All erosion control measures and storm water control measures would be properly maintained until final grading has been completed and permanent erosion control measures are implemented.
- All disturbed areas would be restored to pre-construction contours and revegetated, where applicable, either through hydroseeding or other means, with native or approved non-invasive exotic species.
- All construction-related materials (such as equipment, waste, or excess materials) would be hauled off-site after completion of construction and disposed of or stored at proper disposal and/or storage facilities.

BIO-2: Prior to the start of construction-related activities, the Project limits in proximity to White River, seasonal wetlands, and riparian woodland must be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into waters or sensitive habitats. In particular, seasonal wetlands will be protected to the extent feasible. The Project biologist will monitor the installation of ESA fencing and will periodically inspect the ESA to ensure sensitive locations remain undisturbed.

BIO-3: Refueling or maintenance of equipment without secondary containment shall not be permitted to occur on the within 100 feet of the White River channel. All refueling and maintenance that must occur within 100 feet of the river must occur over plastic sheeting or other secondary containment measures to capture accidental spills before they can contaminate the soil. Secondary containment must have a raised edge (e.g.; sheeting wrapped around wattles).

BIO-4: Equipment will be checked daily for leaks and will be well maintained to prevent lubricants and any other deleterious materials from entering the White River and the associated sensitive habitats.

BIO-5: Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.

BIO-6: A chemical spill kit must be kept onsite and available for use in the event of a spill. In addition to avoidance and minimization measures BIO-1 through BIO-6, the Project would implement the following mitigation measures in order to mitigate for permanent and temporary effects to the White River and associated sensitive habitats:

BIO-7: Following the completion of construction, all temporary effects to riverine, wetland, and riparian habitats would be recontoured and revegetated at a 1:1 ratio, to allow for the habitat to return to its previous function. Where possible, vegetation shall be trimmed rather than fully removed with the guidance of the Project biologist. All disturbed areas will be hydroseeded with a Project biologist approved native seed mix specific to each habitat type.

BIO-8: Permanent effects to the White River channel, associated wetlands, and riparian habitats will be provided compensatory mitigation to result in no net loss of aquatic resources or habitat, at an agency-approved mitigation ratio via one of the follow compensatory mitigation options:

- payment of an in-lieu fee to an agency-approved mitigation site,
- compensatory off-site mitigation at an agency-approved mitigation site,
- compensatory on-site mitigation, or
- a combination of the above compensatory mitigation options.

BIO-9: The County proposes to mitigate for native trees greater than or equal to 4-inches diameter at standard height (DSH) that have been removed by the Project at a minimum 2:1 ratio (per tree) on-site, off-site, or a combination of methods.

BIO-10: Prior to construction-related activities, a reconnaissance level survey will be conducted by the Project biologist to detect the Crotch bumble bee if it is present within the BSA. The survey will be conducted in the springtime, during peak blooming season, when the Crotch bumble bee is more likely to be encountered. High definition cameras will be utilized during survey efforts to capture unique physical characteristics of each bee species encountered. Photos will be submitted to online databases that employ bee experts, such as Bumble Bee Watch or Bee Spotters, as suggested in the Survey Protocols for the Rusty Patched Bumble Bee. If the Crotch bumble bee is presumed present within the BSA, additional coordination with CDFW will occur to determine appropriate measures to avoid impacts to the special-status bee species.

BIO-11: Prior to arrival at the Project site and prior to leaving the Project site, construction-related equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

BIO-12: If hydroseed and plant mixes are used during or post-construction, hydroseed mixes must consist of a biologist approved plant palate seed mix of native species sourced locally to the Project area.

BIO-13: The construction contractor shall avoid removing any vegetation during the nesting bird season (February 1 through August 31). If vegetation must be removed within the nesting season, a pre-construction nesting bird survey must be conducted no more than 3 days prior to vegetation removal. The vegetation must be removed within 3 days from the nesting bird survey.

Where practicable, a minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with the County and CDFW) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist and approved by the County and CDFW.

BIO-14: All construction-related crew members will allow wildlife enough time to escape initial clearing and grubbing activities. Initial clearing and grubbing must be accomplished through the use of hand tools.

BIO-15: The contractor must dispose of all food-related trash in closed containers and must remove it from the Project area each day during construction. Construction-related personnel must not feed or attract wildlife to the Project area.

BIO-16: The contractor must not apply rodenticide or herbicide within the Project area during construction-related activities

Cumulative Impact Analysis:

Less Than Significant Impact With Mitigation: As noted earlier, the Project would permanently impact approximately 0.074 acres of White River, 0.0002 acres of wetland habitat, and 0.106 acres of riparian woodland. In addition, the Project would temporarily impact approximately 0.048 acres of White River, 0.014 acres of seasonal wetland, and 0.226 acres of riparian woodland. **Mitigation Measures BIO-1** through **BIO-16** would reduce impacts to special status species and habitat within the Project area to less than significant.

5.	CULTURAL RESOURCES				
Would the project:		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☒	☐	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Project Impact Analysis:

a), b) Less Than Significant Impact with Mitigation: Historical and Archaeological Resources – According to Caltrans' Historic Property Survey Report (HPSR) for the Project included in Attachment "C" of the MND), a record search for the Area of Potential Effects (APE) and a one-mile radius surrounding the APE was requested from the Southern San Joaquin Valley Information Center (SSJVIC) on April 16, 2019. One documented resource (the Tailholt site southeast of the APE) and one unrecorded resource (a bedrock mortar located northwest of the APE) were found. Three prior cultural resources have occurred within parts of the current APE and another four cultural resource inventories have been previously conducted within the one-mile search radius.[20] In addition, an archaeological field survey of the APE was conducted on September 30, 2020 and December 7, 2020. No cultural resources were identified within the APE.

A search of the Sacred Lands File on file with the Native American Heritage Commission (NAHC) was also requested and resulted in negative results (i.e., no sacred lands were identified in the Project site) in a letter received from the NAHC on June 17, 2020. Pursuant to AB 52 Tulare County RMA staff contacted five Native American Tribes by certified mail on June 18, 2020 regarding the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project. Follow up emails and calls were also made to those tribes on July 28 and July 29, 2020. On August 3, 2020, Shana Powers with Santa Rosa Rancheria responded in an email with potential concerns and would like to be notified of any discoveries. Due to the location, they would be deferred to the Tejon and Tule River Tribes. On August 28, 2020, RMA sent follow up emails to the Tule River Tribe as Santa Rosa Rancheria Tribe deferred to the Tule River Tribe. The County further consulted with the Tule River Indian Tribe, which included a site visit in December 2020.

As an abundance of caution, in the unlikely event that subsurface resources are located, **Mitigation Measures CUL-1** through **CUL-2** would be implemented thereby reducing the potential level of impact to this resource as less than significant for resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or to a resource consider significant to a California Native American tribe. Therefore, the Project would result in a less than significant impact to this resource.

Mitigation Measures: See **Mitigation Measures CUL-1** through **CUL-2**.

Conclusion: Less Than Significant Impact with Mitigation.

c) Less Than Significant Impact with Mitigation: Human Remains – Disturbance to human remains, including those interred outside of formal cemeteries is not anticipated because the project site is already highly disturbed from existing roadways and development. Minimization measure **CUL-3** would further avoid effects on human remains.

Mitigation Measures: To further avoid and minimize potential project effects, measure **CUL-3** would be implemented.

Conclusion: Less Than Significant Impact with Mitigation.

Project Mitigation Measures: The following Mitigation Measures (**CUL-1** through **CUL-3**) would be implemented as part of the project to minimize project effects to biological resources:

[20] State of California Transportation Agency. Historic Property Survey Report. Page 5. Included in Attachment "C" of the MND.

CUL-1: If, in the course of Project construction or operation, any archaeological or historical resources are uncovered, discovered, or otherwise detected or observed, activities within fifty (50) feet of the find shall be ceased. A qualified archaeologist shall be contacted and advise the County of the site's significance. If the findings are deemed significant by the Tulare County Resources Management Agency, appropriate mitigation measures shall be required prior to any resumption of work in the affected area of the proposed Project. Where feasible, mitigation achieving preservation in place will be implemented. Preservation in place may be accomplished by, but is not limited, to: planning construction to avoid archaeological sites or covering archaeological sites with a layer of chemically stable soil prior to building on the site. If significant resources are encountered, the feasibility of various methods of achieving preservation in place shall be considered, and an appropriate method of achieving preservation in place shall be selected and implemented, if feasible. If preservation in place is not feasible, other mitigation shall be implemented to minimize impacts to the site, such as data recovery efforts that will adequately recover scientifically consequential information from and about the site. Mitigation shall be consistent with CEQA Guidelines section 15126.4(b)(3). An archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology, hereafter "qualified archaeologist," should inspect the findings within 24 hours of discovery.

CUL-2: If cultural resources are encountered during construction or land modification activities work shall stop and the County shall be notified at once to assess the nature, extent, and potential significance of any cultural resources. If such resources are determined to be significant, appropriate actions shall be determined. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions to be determined by a qualified archaeologist. For example, activities within 50 feet of the find shall be ceased.

If it is determined that the Project could damage a significant cultural resource, mitigation should be implemented with a preference for preservation in place, consistent with the priorities set forth in CEQA Guidelines Section 15126.4(b)(3). If avoidance is not feasible, a qualified archaeologist should prepare and implement a detailed treatment plan in consultation with the County of Tulare and, for prehistoric resources, the ethnographically associated Native American tribe. If the resource is determined to be a tribal cultural resource, as defined by Public Resources Code 21074, the County of Tulare, in consultation with the ethnographically associated Native American tribe, should, if feasible, minimize significant adverse impacts by avoiding the resource or treating the resource with culturally appropriate dignity, which includes protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

CUL-3: Inadvertent Discovery of Human Remains. In the unlikely event of discovery or recognition of any human remains during construction-related activities, the provisions of CEQA Guidelines § 15064.5(e) shall be followed and such activities should cease within 50 feet of the find until the Tulare County Coroner has been contacted to determine that no investigation of the cause of death is required. If it is determined that the remains are Native American in origin, the Native American Heritage Commission (NAHC) will be contacted within 24 hours. The NAHC will then identify the person or persons it believes to be the most likely descendant (MLD) from the deceased Native American. The MLD would, in turn, make recommendations to the County of Tulare for the appropriate means of treating the human remains and any grave goods.

Cumulative Impact Analysis:

Less Than Significant Impact With Mitigation: As noted earlier, one documented resource (the Tailholt site southeast of the APE) and one unrecorded resource (a bedrock mortar located northwest of the APE) were found. Three prior cultural resources have occurred within parts of the current APE and another four cultural resource inventories have been previously conducted within the one-mile search radius. In addition, an archaeological field survey of the APE was conducted on September 30, 2020 and December 7, 2020. No cultural resources were identified within the APE. Mitigation Measures **CUL-1** through **CUL-3** would reduce impacts to this resource to less than significant.

6.	**ENERGY**				
Would the project:		**SIGNIFICANT IMPACT**	**LESS THAN SIGNIFICANT IMPACT WITH MITIGATION**	**LESS THAN SIGNIFICANT IMPACT**	**NO IMPACT**
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐

b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Project Impact Analysis:

a), b) Less Than Significant Impact. Consumption of Energy and Renewable Energy Plans – The Project is proposing to replace the existing M109 over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility. The bridge is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County in a remote urban rural area. Temporary construction easements are needed throughout the Project area and construction staging would take place within County right-of-way and adjacent privately owned parcels. Minor permanent right-of-way acquisitions are anticipated. The only energy consumed would be through the use of fossil fuels (gasoline and diesel operated equipment) during construction-related activities. These activities will be short-term, intermittent, and temporary as construction is anticipated to be completed within six-months of initiation. As the existing bridge will remain in place until the replacement bridge is completed, no detours would be required of typical users of the bridge; as such, no fuel will be consumed outside of the amounts currently used while traveling along M109. Therefore, the Project will neither have significant environmental impact due to wasteful or unnecessary consumption of energy resources nor obstructs any renewable or energy efficiency plans.

Mitigation Measures: None required.

Conclusion: Less Than Significant Impact.

Cumulative Impact Analysis:

Less Than Significant Impact: As noted, earlier, the only energy consumed would be through the use of fossil fuels (gasoline and diesel operated equipment) during construction- and demolition-related activities. These activities will be short-term, intermittent, and temporary as construction is anticipated to be completed within 6-12 months of initiation. As the existing bridge will remain in place until the replacement bridge is completed, no detours would be required of typical users of the bridge; as such, no fuel will be consumed outside of the amounts currently used while traveling along M109.

7. GEOLOGY/SOILS

Would the project:		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Directly or indirectly cause 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 No. 42.	☐	☐	☐	☒
ii)	Strong seismic ground shaking?	☐	☒	☐	☐
iii)	Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv)	Landslides?	☐	☒	☐	☐
b)	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal	☐	☐	☐	☒

	systems where sewers are not available for the disposal of waste water?				
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

Project Impact Analysis:

a) No Impact to Less Than Significant with Mitigation: Geological Risk – The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death as the project does not propose any development or allow development anywhere where it is not already permitted.

i) No Impact. Faults – "Faults are the indications of past seismic activity. It is assumed that those that have been active most recently are the most likely to be active in the future. Recent seismic activity is measured in geologic terms. Geologically recent is defined as having occurred within the last two million years (the Quaternary Period). All faults believed to have been active during Quaternary time are considered "potentially active."[21] The Project is located in a remote, rural area. According to the Alquist-Priolo Earthquake Fault Zoning Map, there is a Pre-Quaternary fault near the Project site (within 3 miles)[22] .

Mitigation Measures: None required.

Conclusion: **No Impact.**

ii-iv) Less Than Significant Impact with Mitigation. Seismic Shaking, Ground Failure and Landslides – The nearest and controlling seismic source to the site is an unnamed fault located approximately seven (7) miles west from the site. The bridge will be designed to adequately resist the forces of an earthquake. As also discussed in response "6. c.," the project will be designed consistent and compliant with current construction and seismic codes and standards as described in **Mitigation Measure GEO-1**. As a result, the Project would not have a significant potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides.

No significant exposure to landslides is anticipated. Implementation of erosion control standards for slope stabilization implemented through the SWPPP, implementation of **Mitigation Measures GEO-2** and **GEO-3** would further minimize potential impacts.

Mitigation Measures: See **GEO-1, GEO- 2,** and **GEO-3**.

Conclusion: **Less Than Significant Impact with Mitigation**.

b) Less Than Significant Impact. Erosion – The proposed Project takes place largely at existing paved areas. No substantial loss of topsoils would result as the Project is largely on an existing bridge and roadway. BMPs and erosion control measures implemented under the NPDES general construction permit would further avoid and minimize the potential for topsoil or soil erosion during construction.

Mitigation Measures: None required.

Conclusion: **Less Than Significant Impact**.

c) Less Than Significant Impact with Mitigation. Unstable Soils–A geotechnical investigation report will be prepared to evaluate soil and geological characteristics and behavior within the project site. The geotechnical survey investigations are necessary to test the suitability of the ground to support future abutments of the replacement bridge structure. The Project will be designed to be consistent with the geotechnical report and in compliance with current construction and seismic codes and standards as described in **Mitigation Measure GEO-1**. As a result, the Project would not result in on-or off- site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Mitigation Measures: See **GEO-1**.

[21] Tulare County General Plan 2030 Update. Appendix B. General Plan Background Report. Page 8-5.

[22] California Department of Conservation, Fault Activity Map of California. Accessed April 2021 at: https://maps.conservation.ca.gov/cgs/fam/app/.

Conclusion: Less Than Significant Impact with Mitigation.

d) No Impact. Expansive Soils – According to the USDA, NRCS, and the Soil Survey of Tulare County, the proposed Project site contains Blasingame sandy loam soil, with 30 to 50 percent slopes, and is well drained.[23] The proposed Project is for a bridge replacement and would not be impacted by the soil characteristic in the area.

Mitigation Measures: None required.

Conclusion: No Impact.

e) No Impact. Septic and Waste Water – The proposed Project does not propose septic tanks nor would it impact waste water.

Mitigation Measures: None required.

Conclusion: No Impact.

f) No. Impact. Paleontological resource or unique geologic feature – There are no known paleontological resources within the Project area, nor are there any known unique geologic features in the proposed Project area. Thus, the Project would have no impact on this resource.

Mitigation Measures: None required.

Conclusion: No Impact.

Project Mitigation Measures: Mitigation Measures GEO-1 through **GEO-3** would be implemented as part of the project to minimize project effects to geological resources:

GEO-1: Construction and design of the proposed project shall be in compliance with current construction and seismic codes and standards, which would reduce potential seismic hazard risks to acceptable levels. Specific design and construction measures recommended in subsequent geotechnical studies to reduce geologic or seismic hazards shall be implemented. Subsequent geotechnical studies shall be completed prior to completion of final design for the proposed project.

GEO-2: Contract specifications will include the following BMPs, where applicable, to reduce erosion during construction:

- Implementation of the project will require approval of a site-specific SWPPP that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;
- Existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control;
- Stabilizing materials will be applied to the soil surface to prevent the movement of dust from exposed soil surfaces on construction sites as a result of wind, traffic, and grading activities;
- Roughening and terracing will be implemented to create unevenness on bare soil through the construction of furrows running across a slope, creation of stair steps, or by utilization of construction equipment to track the soil surface. Surface roughening or terracing reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing infiltration of water into the soil, and aiding in the establishment of vegetative cover from seed.

GEO-3: To conform to water quality requirements, the SWPPP must include the following:

- Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must be a minimum of 100 feet from surface waters. Any necessary equipment washing must occur where the water cannot flow into surface waters. The project specifications will require the contractor to operate under an approved spill prevention and clean-up plan;
- Construction equipment will not be operated in flowing water;
- Construction work must be conducted according to site-specific construction plans that minimize the potential for sediment input to surface waters;

[23] USDA. Natural Resources Conservation Service. Web Soil Survey. Accessed April 2021 at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering surface waters;
- Equipment used in and around surface waters must be in good working order and free of dripping or leaking contaminants; and,
- Any concrete rubble, asphalt, or other debris from construction must be taken to an approved disposal site.

Cumulative Impact Analysis:

Less Than Significant Impact With Mitigation: As noted earlier, the Project will be designed to be consistent with the geotechnical report and in compliance with current construction and seismic codes and standards as described in Mitigation Measure GEO-1. Implementation of erosion control standards for slope stabilization implemented through the SWPPP, implementation of **Mitigation Measures GEO-2** and **GEO-3** would further minimize potential impacts

8. GREENHOUSE GAS EMISSIONS

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

Project Impact Analysis:

a) Less Than Significant Impact. Greenhouse Gas Emissions – In addition to adherence to local, regional, and state standards for pollutants, all projects under CEQA are required to identify any potential impacts the project may have on climate change and emission of greenhouse gasses (GHG). Common GHG includes vapor, carbon dioxide, methane, nitrous oxides, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols.

The Project would have less than significant impacts on climate change or GHG emissions. The Project would replace an obsolete bridge, no additional traffic would be added. The addition of a formalized second through-lane would not effectively change traffic because the bridge currently connects with roadways carrying two-lanes. Long-term traffic volumes would be the same with or without the Project. There would be no difference in CO_2 emissions comparing existing levels and future levels with the Build Alternative.

Construction emission estimates from a similar project (Deep Creek Bridge Replacement, which consisted of a 100-foot-long concrete slab bridge) are used in this document by analogy as similar projects will likely result in similar emissions.

As shown in **Table AQ-2**, estimated CO_2 emissions during construction are estimated to be 384 metric tons/year for the Build Alternative, whereas the No-Build Alternative would not have construction CO_2 emissions. The San Joaquin Valley Air Pollution Control District has not adopted CEQA Thresholds of Significance for CO_2, including CO_2 construction emissions. Due to the short-term, intermittent, and temporary nature of the Project's CO_2 emissions, the Project would have a less than significant impact on this resource.

Mitigation Measures: None required.

Conclusion: Less Than Significant Impact.

b) No Impact. Conflict with Plans – Tulare County adopted its Tulare County Climate Action Plan in 2012 and subsequently adopted the 2018 Climate Action Plan Update in December 2018. Since the Project is planned in the County's General Plan, the Federal Transportation Improvement Program, and Regional Transportation Plan, the Project is not anticipated to conflict with the Tulare County Climate Action Plan or other applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of greenhouse gases (Tulare County, 2012).

Mitigation Measures: None required.

Conclusion: No Impact.

Cumulative Impact Analysis

Less Than Significant Impact: As noted earlier, the Project would have less than significant impacts on climate change or GHG emissions as the Project would replace an obsolete bridge, no additional traffic would be added. Long-term traffic volumes would be the same with or without the project. There would be no difference in CO2 emissions comparing existing levels and future levels with the Build Alternative. Since the Project is consistent with the County's General Plan, the Federal Transportation Improvement Program, and Regional Transportation Plan. Lastly, the Project is not anticipated to conflict with the Tulare County Climate Action Plan or other applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of greenhouse gases.

9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
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 or excessive noise for people residing or working the project area?	☐	☐	☐	☒
f)	Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Project Impact Analysis:

a) Less Than Significant Impact. Transport of Hazardous Materials – A Draft Hazardous Waste Initial Site Assessment (ISA, included as Attachment "D" in this MND) was prepared in February 2021 to evaluate the potential for hazardous waste related impacts this project could have on the environment (UNICO Engineering). Routine hazardous waste materials such as gasoline would be used and transported in the Project area during construction activities. BMPs for use, transportation, and disposal of these types of routine hazardous materials would be implemented during construction to ensure impacts are less than significant.

Mitigation Measures: None required.

Conclusion: Less Than Significant Impact.

b) Less Than Significant Impact with Mitigation. Public Hazards – The Project is not anticipated to induce an accidental upset involving the release of hazardous materials into the environment with mitigation incorporated. An ISA was prepared in February 2021 for the Project (see Attachment "D" of this MND), and it evaluated the potential for hazardous materials or petroleum hydrocarbons to exist within the study area. The ISA was based on governmental records search, aerial photograph, topographic map review and visual site survey.

The ISA identified several potential Recognized Environmental Conditions (RECs) that may need further investigations if the Project area is anticipated to change (due to a change in the proposed Project or staging area). As demolition of the existing bridge will occur when the replacement bridge is complete, RECs include polychlorinated biphenyl (PCB) hazard, lead and heavy metals associated with pavement striping, soils with an accumulation of aerially deposited lead (ADL), asbestos containing materials (ACM) and lead containing paint (LCP) in the bridge as it was built in 1939, and potential septic systems with debris/hazardous materials near the project alignment when demolition occurs (shown in Table 1 of the ISA).

- "Based on preliminary plans, temporary construction easements will be needed within the County right-of-way and adjacent privately owned parcels throughout the length of the project. It is anticipated that right-of-way acquisitions will be required. The sites to be acquired are adjacent to the project. Should final plans indicate that a portion of these parcels will be acquired for new right-of-way, a preliminary environmental screening, to determine presence or absence, (limited subsurface sampling and laboratory analysis) should be performed for potentially elevated levels of petroleum hydrocarbons and MTBE contamination within the limits of proposed construction, and/or right-of way acquisition. If site screening encounters elevated levels of petroleum hydrocarbons and/or MTBE, a limited Phase II Site Assessment should be performed. The Phase II Site Assessment should consist of subsurface sampling and laboratory analysis and be of sufficient quantity to define the extent and concentration of contamination within the areal extent and depths of planned construction-related activities adjacent to these sites. The Phase II Site Assessment should also provide both a Health and Safety Plan for worker safety and a Work Plan for handling and disposing contaminated soil during construction.

- The proposed project affects yellow thermoplastic pavement markings and other types of markings containing lead-based paint. Affected markings and striping as a result of the project, should be collected, tested, and/or disposed of in accordance with applicable regulations; therefore, to avoid impacts from pavement striping during construction, it is recommended that testing and removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Specifications and Standard Special Provisions for removing traffic stripes and pavement markings.

- ADL is commonly associated with transportation construction due to emissions from vehicles powered by lead gasoline. It is recommended that testing be conducted prior to excavation to determine the lead content present in soil along highways so that affected soil can be properly managed. Criteria for construction safety practices when handling lead can be found in California Code of Regulations (CCR), Title 8, Section 1532.1.

- ACM is commonly found on bridges built in 1939. It is recommended that an ACM is conducted by a Certified Asbestos Consultant (CAC) or by a Certified Site Surveillance Technician (CSST) working under a CAC. Abatement of ACM should be conducted by contractors certified to perform such work and in accordance with state and federal regulations. Waste management issues for ACM are regulated under California Code of Regulations Title 22.

- Naturally Occurring Asbestos (NOA) occurs randomly throughout Northern California in rocks and soil because of natural geological processes. Natural weathering or construction activities can disturb soil or rock that contains NOA and release the fibers into the air potentially affecting pedestrians and workers in the area. Per the Naturally Occurring Asbestos Hazard map, the M109 White River Bridge Replacement location is less likely to contain NOA, however small bodies of rock or soil with moderate or higher likelihood of asbestos presence can exist. Criteria for construction safety practices regarding NOA can be found in CCR, Title 8, Section 5208.

- Any leaking transformers observed during the project should be considered a potential polychlorinated biphenyl (PCB) hazard. A detailed inspection of individual electrical transformers was not conducted for this ISA. However, should leaks from electrical transformers (that will either remain within the construction limits or will require removal and/or relocation) be encountered during construction-related activities, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should

also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.

- As is the case for any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during project construction-related activities. For any previously unknown hazardous waste/ material encountered during construction-related activities, the procedures outlined in Appendix B (Caltrans Unknown Hazard Procedures) shall be followed."[24]

The ISA did not find direct or indirect evidence of spills or releases of petroleum hydrocarbons within the study area. Further, no samples were found to contain Asbestos Containing Materials and Aerially Deposited Lead concentrations are expected to be non-substantial due to the relatively low historical traffic in the study area.

Mitigation Measures: See **HAZ-1** through **HAZ-6**.

Conclusion: Less Than Significant Impact with Mitigation.

c) Less Than Significant Impact: Hazards to Schools – Richgrove School, grades K-8 (in Richgrove, CA), is the nearest Tulare County school and it is greater than 16 miles to the west of the Project site. No additional handling or transport of hazardous material is anticipated with the project since an existing bridge is being replaced. As a result, there would be a less than significant impact to the school as a result of project related to hazardous materials.

Mitigation Measures: None required.

Conclusion: Less Than Significant Impact.

d) No Impact. Hazardous Waste & Substances List – The proposed Project is not on a site included in the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, which is also known as the Cortese List. A review of the "Cortese" Hazardous Waste & Substances Sites List indicated that there are no toxic sites within 2 miles of the Project study area.[25]

Mitigation Measures: None required.

Conclusion: No Impact.

e) No Impact. Airport Hazards – The Project is not within an airport land use plan area nor is it within two miles of an airport. The nearest airport, Porterville Airport, is approximately 19 miles northwest of the project site. The Project would not result in a safety hazard for people residing or working in the Project area.

Mitigation Measures: None required.

Conclusion: No Impact.

f) Less Than Significant Impact. Emergency Response – "Based on preliminary plans, temporary construction easements will be needed within the County right-of-way and adjacent privately owned parcels throughout the length of the project. It is anticipated that right-of-way acquisitions will be required."[26] The Project proposes a bridge replacement in a rural setting. Thus, the Project would have a less than significant impact to this resource.

Mitigation Measures: None required.

Conclusion: Less Than Significant Impact.

g) Less Than Significant Impact. Wildland Fires – According to CalFire's Fire Hazard Severity Zones in SRA map, the Project area is located in a State Responsibility Area (SRA) with moderate risk.[27] The Project is anticipated to have less than

[24] Draft Hazardous Waste Initial Site Assessment. March 2021. Pages ii-iv. Prepared by UNICO Engineering. Included in Attachment "D" of this MND.

[25] California Dept. of Toxic and Substances Control. Accessed February 2021 at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Tulare+County%2C+CA

[26] Draft Hazardous Waste Initial Site Assessment. March 2021. Pages ii. Prepared by UNICO Engineering. Included in Attachment "D" of this MND.

[27] CalFire Fire Hazard Severity Zones in SRA. Accessed April 2021 at: Map of CAL FIRE's Fire Hazard Severity Zones in State Responsibility Areas – Tulare County

significant impact regarding exposure of 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. While the Project is adjacent to foothill agricultural land uses, construction would take place adjacent to an existing bridge. The Project does not result in a newly accessible area and it does not result in the construction of homes or commercial development into a wildland area.

Project Mitigation Measures: See **HAZ-1** through **HAZ-9**.[28]

Conclusion: Less Than Significant Impact.

Project Mitigation Measures: Mitigation Measures HAZ-1 through **HAZ-9** would be implemented as part of the project to minimize project effects from the transport and use of hazardous materials:

HAZ-1: Based on preliminary plans, temporary construction easements will be needed from the adjacent privately owned parcels throughout the length of the project. It is anticipated that right-of-way acquisitions are anticipated. These sites are adjacent to the project. Should final plans indicate that a portion of these parcels will be acquired for new right-of-way, a preliminary environmental screening, to determine presence or absence, (limited subsurface sampling and laboratory analysis) should be performed for potentially elevated levels of petroleum hydrocarbons and MTBE contamination within the limits of proposed construction, and/or right-of way acquisition. If site screening encounters elevated levels of petroleum hydrocarbons and/or MTBE, a limited Phase II Site Assessment should be performed. The Phase II Site Assessment should consist of subsurface sampling and laboratory analysis and be of sufficient quantity to define the extent and concentration of contamination within the areal extent and depths of planned construction activities adjacent to these sites. The Phase II Site Assessment should also provide both a Health and Safety Plan for worker safety and a Work Plan for handling and disposing contaminated soil during construction.

HAZ-2: There is a potential that the proposed project could affect yellow thermoplastic pavement markings and other types or colors of street or municipal markings containing lead-based paint. If such markings are affected as a result of the project, such markings will be collected, tested, and/or disposed of in accordance with applicable regulations. Therefore, to avoid impacts from pavement striping during construction, it is recommended that testing and removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Specifications Section 84.9-Existing Markings for removing traffic stripes and pavement markings.

HAZ-3: ADL is commonly associated with transportation construction due to emissions from vehicles powered by lead gasoline. It is recommended that testing be conducted to prior to excavation to determine the lead content present in soil along highways so that affected soil can be properly managed. Criteria for construction safety practices when handling lead can be found in California Code of Regulations (CCR), Title 8, Section 1532.1.

HAZ-4: A single "Lead Compliance Plan" should be prepared for the project because of lead in the soils below the bridge in the study area and lead-based paint on the bridge (section 7- 1.02K(6)(j)(ii) of the SSPs and Section 7-1.02K(6)(j)(iii) of the SSPs). The SSPs should be included in the Contract requiring a Health & Safety Plan for workers in accordance with Cal OSHA Title 8, Section 1532.1. With respect to lead in the paint, the Special Provisions should address paint abatement prior to construction if necessary, worker protections with respect to handling of materials coated with lead-based paint, temporary storage, testing, and transportation to an appropriate disposal or recycling facility. The Resident Engineer should have the contractor provide written documentation that recycling or disposal facilities acknowledge the potential for lead on the material received.

HAZ-5: Naturally Occurring Asbestos (NOA) occurs randomly throughout Northern California in rocks and soil because of natural geological processes. Natural weathering or construction activities can disturb soil or rock that contains NOA and release the fibers into the air potentially affecting pedestrians and workers in the area. Per the Naturally Occurring Asbestos Hazard map, the M109 White River Bridge Replacement location is less likely to contain NOA, however small bodies of rock or soil with moderate or higher likelihood of asbestos presence can exist. Criteria for construction safety practices regarding NOA can be found in CCR, Title 8, Section 5208

HAZ-6: Any leaking transformers observed during the project should be considered a potential polychlorinated biphenyl (PCB) hazard. A detailed inspection of individual electrical transformers was not conducted for this ISA. However, should leaks from electrical transformers (that will either remain within the construction limits or will require removal and/or

[28] Draft Hazardous Waste Initial Site Assessment. March 2021. Pages ii. Prepared by UNICO Engineering. Included in Attachment "D" of this MND.

relocation) be encountered during construction-related activities, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.. ()

HAZ-7: It is recommended that an ACM is conducted by a Certified Asbestos Consultant (CAC) or by a Certified Site Surveillance Technician (CSST) working under a CAC. Abatement of ACM should be conducted by contractors certified to perform such work and in accordance with state and federal regulations. Waste management issues for ACM are regulated under California Code of Regulations Title 22 and the National Emission Standards for Hazardous Air Pollutants (NESHAP).

HAZ-8: Any chemically treated wood must be treated as Treated Wood Waste (TWW) and disposed of as hazardous waste. For the TWW, the DTSC regulations §66261.9.5 provide alternative management standards (AMS) for TWW. Caltrans 2015 Special Standard Provision (SSP) for TWW, SSP 14-11.14, is based on DTSCs AMS regulations. This SSP directs the Contractor to follow the AMS including providing training to all personnel that may encounter TWW. This training must include, at a minimum, safe handling, sorting, and segregating, storage, labeling (including date), and proper disposal methods.

HAZ-9: As is the case for any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during project construction-related activities. For any previously unknown hazardous waste/ material encountered during construction-related activities, the procedures outlined in Appendix B (Caltrans Unknown Hazard Procedures) shall be followed (Haz 6)."[29]

Cumulative Impact Analysis:

Less Than Significant Impact With Mitigation: Implementing **Mitigation Measures HAZ-1** through **HAZ-9**, as applicable, will result in a Less than significant impact.

10.	**HYDROLOGY AND WATER QUALITY**				
Would the project:		**SIGNIFICANT IMPACT**	**LESS THAN SIGNIFICANT IMPACT WITH MITIGATION**	**LESS THAN SIGNIFICANT IMPACT**	**NO IMPACT**
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☒	☐	☐
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i)	Result in substantial erosion or siltation on-or off-site?	☐	☐	☒	☐
ii)	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	☐	☐	☒	☐
iii)	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?	☐	☐	☐	☒

[29] Draft Hazardous Waste Initial Site Assessment. March 2021. Pages 16-17. Prepared by UNICO Engineering. Included in Attachment "D" of this MND.

iv)	Impede or redirect flood flows?	☐	☐	☐	☒
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e)	Conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Project Impact Analysis:

a) Less than Significant Impact with Mitigation: Water Quality – "The Project storm water drainage would be designed consistent with County requirements and the Caltrans Project Planning and Design Guide and Storm Water Management Plan. Temporary Best Management Practices (BMPs), including practices for erosion control, would be implemented during construction-related activities.

Regulatory permits under the Clean Water Act (CWA) will be obtained, including a §401 Water Quality Certification and a §404 Nationwide Permit 14 for the discharge of dredged or fill material into waters of the United States (U.S.) and State. Additionally, a Fish and Game Code Section (§) 1602 will be obtained for Project effects to riparian habitats and CDFW jurisdictional floodplain areas. A[n] NPDES Permit from the Regional Water Quality Control Board (RWQCB) will be obtained as well. Any further avoidance or minimization measures from regulatory permitting would be incorporated into the Project, and adherence to the requirements set forth in these permits will further minimize impacts to water quality and aquatic resources."[30]

Measures WQ-1 through **WQ-5**, on suggested on pages 30 and 31 of the Water Quality Technical Memorandum, would be implemented to avoid and minimize water quality impacts during construction. Therefore, project activities would not violate any water quality standards or waste discharge requirements.

Mitigation Measures: See **Mitigation Measure WQ-1** through **WQ-5**.

Conclusion: Less Than Significant Impact with Mitigation

b) No Impact: Groundwater Management – "The Project is located approximately five miles outside of the nearest groundwater basin, the Tule Groundwater Sub-basin. White River flows from east to west and ultimately drains to this groundwater basin."[31] No groundwater wells would be drilled as part of the proposed project. The proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge that would result in a net deficit in aquifer volume or lowering of the local groundwater table level.

Mitigation Measures: None required.

Conclusion: No Impact.

c) i-iv) Less Than Significant Impact. Drainage Patterns – Drainage improvements by the proposed project would not substantially alter the existing drainage pattern in a manner that would result in substantial erosion or siltation on- or off-site. As mentioned in Item a., erosion control would be implemented during construction-related activities. Thus, surface runoff is not anticipated in paved and/or proper sloped areas with controlled surface drainage facilities.[32] During final design, the Project would be designed to accommodate the necessary drainage capacity, handle the additional runoff created by the increase in impervious surfaces, or to accommodate the removal of impervious surfaces within the Project area.[33] The Project is for a bridge replacement and would not impede or redirect flood flows.

Mitigation Measures: None required.

Conclusion: Less Than Significant Impact.

[30] Mountain Road 109 White River Bridge Replacement Project Water Quality Technical Memorandum Mountain Road 109 White River Bridge Replacement Project. Tulare County, California. District 6 – TUL BRLS-5946(170). February 202. Page iii. Prepared by Dokken Engineering and included in Attachment "F" of this MND.

[31] Ibid. Page 11.

[32] Op. Cit.

[33] Op. Cit. Pages 23 & 24.

d) Less Than Significant Impact. Inundation – According to the Federal Emergency Management Agency (FEMA) Flood Insurance Map (FIRM), the Project area is designated as Zone A. Zone A indicates high risk flood areas, with a 1% annual chance of flooding. The Project is not located within a Central Valley Flood Protection Board (CVFPB) Designated Floodway (DF) nor is it within 30 feet from a Regulated Stream. Due to its location outside of a DF and Regulated Stream, the Project would not require a CVFPB permit.[34] Roadways may contain oil, grease, petroleum products, zinc, copper, lead, cadmium, iron, and other trace metals. However, due to the low frequency of traffic, concentrations of these pollutants would be minimal at the Project location. Thus, the Project would have less than significant impact to this resource.

Mitigation Measures: None required.

Conclusion: Less Than Significant Impact.

e) Less Than Significant Impact. Water Quality Control or Sustainable Groundwater Management Plans – Per the discussions in Items a) through c), the Project would not cause any conflicts or result in the obstruction of any water quality control or groundwater management plans.

Mitigation Measures: See **WQ-1 through WQ-5**

Conclusion: Less Than Significant Impact.

Project Mitigation Measures:

WQ-1: BMPs would be incorporated into Project design and Project management to minimize impacts on the environment including the release of pollutants (oils, fuels, etc.):

- The area of construction and disturbance would be limited to as small an area as feasible to reduce erosion and sedimentation.
- Measures would be implemented during land-disturbing activities to reduce erosion and sedimentation. These measures may include mulches, soil binders and erosion control blankets, silt fencing, fiber rolls, temporary berms, sediment desilting basins, sediment traps, and check dams.
- Existing vegetation would be protected where feasible to reduce erosion and sedimentation. Vegetation would be preserved by installing temporary fencing, or other protection devices, around areas to be protected.
- Exposed soils would be covered by loose bulk materials or other materials to reduce erosion and runoff during rainfall events.
- Exposed soils would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction-related activities such as traffic and grading activities. The Project would comply with the Valley Air District's Regulation VIII (Fugitive PM10 Prohibitions).
- All construction roadway areas would be properly and effectively protected to prevent excess erosion, sedimentation, and water pollution.
- All vehicle and equipment maintenance procedures would be conducted off-site. In the event of an emergency, maintenance would occur away from White River.
- All concrete curing activities would be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly.
- All construction materials, vehicles, stockpiles, and staging areas, to the extent feasible, would be situated outside of the stream channel as feasible. All stockpiles, to the extent feasible, would be covered.
- Energy dissipaters and erosion control pads would be provided at the bottom of slope drains. Other flow conveyance control mechanisms may include earth dikes, swales, or ditches. Stream bank stabilization measures would also be implemented.
- All erosion control measures and storm water control measures would be properly and effectively maintained until final grading has occurred and permanent storm water measures are in place.
- All disturbed areas would be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native or approved non-invasive exotic species.

WQ-2: Any requirements for additional avoidance, minimization, and/or mitigation measures from all required regulatory agencies will be adhered to.

[34] Op. Cit. Page 11.

WQ-3: The Project limits in proximity to White River, seasonal wetland, and riparian woodland will be marked as an Environmental Sensitive Area (ESA) or either be staked or fenced with high visibility material to ensure construction activities will not encroach further beyond established limits

WQ-4: The construction contractor will adhere to the NPDES Permit pursuant to §402 of the CWA. This permit authorizes storm water and authorized non-storm water discharges from construction-related activities. As part of this Permit requirement, a SWPPP or Water Pollution Control Plan (if ground disturbance is less than 1 acre) will be prepared prior to construction consistent with the requirements of the RWQCB. This SWPPP/Water Pollution Control Plan will incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality.

WQ-5: Storm water systems will be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological.

Cumulative Impact Analysis:

Less Than Significant Impact With Mitigation: Implementing **Mitigation Measures WAQ-1** through **WAQ-5**, as applicable, will result in a less than significant impact.

11. LAND USE AND PLANNING

Would the project:		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Project Impact Analysis:

a) No Impact. Community Divisions – Replacement of the existing bridge structure will not disrupt or divide an established community. The proposed project is located in a remote rural suburban area. Temporary construction easements are needed throughout the Project area and construction staging would take place within County right-of-way and adjacent privately owned parcels. Minor permanent right-of-way acquisitions are anticipated.

Mitigation Measures: None required.

Conclusion: No Impact.

b) No Impact. Land Use Plans – The Project is consistent with all applicable land use plans, policies and regulations and will not cause any significant environmental impact due to conflict with any land use plans, policies, or regulations

Mitigation Measures: None required.

Conclusion: No Impact.

Cumulative Impact Analysis:

No Impact. As there will be no Project level impacts, there will be no cumulative impacts.

12.	MINERAL RESOURCES				
Would the project:		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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?	☐	☐	☐	☒

Project Impact Analysis:

a), b) No Impact: Mineral Resources – Pursuant to the 2030 Update of the 2012 Tulare County General Plan, the proposed project is not located within a designated Tulare County Mineral Resource Zone (Tulare County, 2012). In addition, the project is located within the vicinity of any mines shown on the Department of Conservation Mines Map.[35]

Mitigation Measures: None required.

Conclusion: No Impact.

Cumulative Impact Analysis:

No Impact. As there will be no Project level impacts, there will be no cumulative impacts.

13.	NOISE				
Would the project result in:		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b)	Generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐
c)	For a project located within the vicinity of a private airstrip or 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?	☐	☐	☐	☒

Project Impact Analysis:

"The vicinity of the project area is most similar to that of a "rural suburban" setting due to the small population, lack of local businesses, and minimal traffic on Road M109."[36]The Project is proposing the replacement of an existing 1-lane bridge with a 2-lane bridge but would not create any additional through-traffic lanes. "Temporary construction easements are needed throughout the project area and construction-related staging would take place within County right-of-way and adjacent privately owned parcels. Minor permanent right-of-way acquisitions are anticipated. Construction-related activity would occur adjacent to low population-density rural areas zoned

[35] State of California Department Of Conservation Division of Mine Reclamation, Maps: Mines and Mineral Resources accessed April 2021 at: https://maps.conservation.ca.gov/mol/index.html.

[36] Noise Technical Memorandum. February 2021. Page 4. Prepared by Dokken Engineering. Included as Attachment "E" of this MND.

Foothill, Agricultural." [37]Pile driving for installation of footings of bridge replacement may take place during construction. The nearest sensitive receptors (residences) are located approximately 150 feet from pile driving would occur, and the proposed Project would use vibratory pile driving to minimize noise and vibration.[38]

a) Less Than Significant with Mitigation. Ambient noise levels – The proposed Project will follow Section 14-8.02 Noise Control Standard Specifications of Caltrans'. Construction related noise from this project would be intermittent, short-term, and temporary in nature. "Further, noise levels would vary depending on the type, duration, and occurrence of construction-related activity."[39] Minimal adverse noise impacts from construction related activities are anticipated. In addition to some relevant County of Tulare policies (listed at the bottom of this section), **Mitigation Measure NOI-1** would be implemented to further minimize impacts from construction related noise.

NOI-1: To minimize the construction-generated noise, abatement measures from Standard Specification 14-8.02 "Noise Control" and SSP 14-8.02 must be followed:

- Do not operate construction equipment or run the equipment engines from 7:00 p.m. to 7:00 a.m. or on Sundays, with the exception that you may operate equipment within the Project limits during these hours to:
  Service traffic control facilities
  Service construction equipment
- Equip an internal combustion engine with the manufacturer recommended muffler.
- Do not operate an internal combustion engine on the job site without the appropriate muffler.
- A variance from these requirements may be provided by request at the discretion of Tulare County.

The loudest construction activities may include engine noise from construction vehicles, jack hammering, and pile driving. For this project, lowest construction equipment-related noise levels would be 55 A-weighted decibels (dBA) at a distance of 50 feet for sound from a pick-up truck. Highest noise levels would be up to 90 dBA (at a distance of 50 feet) for pile driving, and for jackhammering with 88 dBA at a distance of 50 feet. The Project construction is expected to get completed with a twelve-month time frame.

Mitigation Measures: See Mitigation Measure NOI-1.

Conclusion: **Less Than Significant Impact with Mitigation**.

b) Less Than Significant Impact. Groundborne Noise – The project would take place within areas designated for rural agricultural land uses and is zoned for Foothill Agriculture. The project occurs adjacent to rural residences, considered sensitive noise receptors. The proposed project is not anticipated to result in substantial ground borne vibration or noise levels. Construction related groundborne noise and ground vibration would be localized, resulting from use of jackhammer, concrete saws for pavement removal, and other pavement breaking equipment. Driving of sheet piles is anticipated for the bridge widening. These disturbances would be temporary and intermittent and would occur only during construction. Therefore, the project is not anticipated to result in substantial groundborne vibration or noise levels.

Mitigation Measures See **NOI-1**, earlier.

Conclusion: **Less Than Significant Impact**.

c) No Impact: Airport – The nearest airport, Porterville Airport, is approximately 19 miles to the northwest of the project site. Thus, there is no impact to this resource from the Project.

Project Mitigation Measure: None required.

Conclusion: **No Impact**.

Cumulative Impact Analysis:

[37] Ibid.
[38] Op Cit.
[39] Op Cit. Page 5.

Less Than Significant Impact. Implementation of **Mitigation Measure NOI-1** would reduce noise to a less than significant impact. Also, as Project related noise will be short-term, intermittent, and temporary (i.e., over the 6- to 12-month construction timeframe), noise will conclude upon completion of the Project.

14. POPULATION AND HOUSING

Would the project:		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a)	Induce substantial unplanned 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 people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Project Impact Analysis:

a) No Impact. Population Growth – The improvements proposed would not induce population growth as it accommodates already planned growth in the area.

Mitigation Measures: None required.

Conclusion: **No Impact**.

b) No Impact. Housing Displacement – The project would not displace any residential housing, nor would it require relocation of any people in the vicinity. The Project is proposing to replace the existing M109 over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility.

Mitigation Measures: None required.

Conclusion: **No Impact.**

Cumulative Impact Analysis:

No Impact. As there will be no Project level impacts, there will be no cumulative impacts.

15. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a)	Fire protection?	☐	☐	☐	☒
b)	Police protection?	☐	☐	☐	☒
c)	Schools?	☐	☐	☐	☒
d)	Parks?	☐	☐	☐	☒
e)	Other public facilities?	☐	☐	☐	☒

Project Impact Analysis:

a), b) No Impact. Fire & Police Protection – The Project proposal is for a bridge replacement. As the Project would not result in an increase to population nor an increase in property resources such as homes, auxiliary structures, businesses, etc.; the Project would have no impact to these resources.

Mitigation Measures: None required.

Conclusion: No Impact.

c) No Impact. Schools – Richgrove School, grades K-8 (in Richgrove, CA), is the nearest Tulare County school and it is greater than 16 miles to the west of the Project site The Project proposed is for a bridge replacement; the Project would have no impact on this resource.

Mitigation Measures: None required.

Conclusion: No Impact.

d), e) No Impact. Parks & Public Facilities – While there are no parks or other public facilities within the Project site, the Sequoia National Forest boundary is approximately 11 miles to the southeast. As a replacement of an existing bridge, the Project would not result in the need for new or physically altered parks, or other public facilities. No mitigation measures would be required.

Mitigation Measures: None required.

Conclusion: No Impact.

Cumulative Impact Analysis:

No Impact: As noted earlier, the Project proposal is for a bridge replacement. As the Project would not result in an increase to population nor an increase in property resources such as homes, auxiliary structures, businesses, etc.; the Project would have no impact to Fire or Police Services. Schools, parks, or other public services would not be impacted by the Project.

16. RECREATION

Would the project:		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Project Impact Analysis:

a), b) No Impact. Recreational Facilities – While there are no parks or other public facilities within the Project site, the Sequoia National Forest boundary is approximately 11 miles to the southeast. As such, no increased use or physical deterioration is anticipated. As the Project consists of replacing an existing bridge, the Project would not result in the need for new or physically altered parks, or other public facilities. As such, the Project would result in no impact to this resource.

Mitigation Measures: None required.

Conclusion: No Impact.

Cumulative Impact Analysis:

No Impact. As the Project consists of replacing an existing bridge, the Project would not result in the need for new or physically altered parks, or other public facilities. As such, the Project would result in no cumulative impact to this resource.

17.	TRANSPORTATION				
Would the project:		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b)	Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☐	☒
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses, (e.g., farm equipment)?	☐	☐	☐	☒
d)	Result in inadequate emergency access?	☐	☐	☐	☒

Project Impact Analysis:

a), b) No Impact. Conflict with a program, plan, ordinance or policy – The Circulation Element of the Tulare County General Plan Update (2012) states that the County, under Goal and Policy TC-1.16, "shall strive to develop and manage its roadway system (both segments and intersections) to meet a Level of Service (LOS) of "D" or better in accordance with the LOS definitions established by the Highway Capacity Manual." As noted earlier, replacement of this Project is included in TCAG's RTP and FTIP for bridge replacement projects, as such, there will be no impact to this resource.

Mitigation Measures: None required.

Conclusion: No Impact.

c) No Impact. Hazards due to a design feature –The proposed Project is the replacement of a functionally obsolete one-lane bridge with a new two-lane bridge that will significantly improve safety along M109 as it crosses the White River. Thus, the Project will result in no adverse impact, conversely, it will provide a beneficial impact to this resource.

Mitigation Measures: None required.

Conclusion: No Impact.

d) No Impact. Emergency Access – All design features would comply with County or Caltrans standards. The existing bridge will remain open as the replacement bridge is constructed allowing continued use of M109 over the White River without the need for a detour. As such, there will be not any anticipated delays during construction- and demolition-related activities. As such, there will be no impact to this resource.

Mitigation Measures: None required.

Conclusion: No Impact.

Cumulative Impact Analysis:

Less Than Significant Impact: As noted earlier, the Project will not result in any adverse impacts. Also, it will have beneficial impact as it will result in the replacement of a functionally obsolete one-lane bridge with a new two-lane bridge that will significantly improve safety along M109 as it crosses the White River. Also, as the existing bridge will remain open as the replacement bridge is constructed it will allow continued use of M109 over the White River without the need for a detour.

18.	TRIBAL CULTURAL RESOURCES				
Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☒	☐	☐
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

Project Impact Analysis:

a), b) Less Than Significant Impact with Mitigation. According to Caltrans' Historic Property Survey Report (HPSR) for the Project (included in Attachment "C" of this MND, a record search for the Area of Potential Effects (APE) and a one-mile radius surrounding the APE was requested from the Southern San Joaquin Valley Information Center (SSJVIC) on April 16, 2019. One documented resource (the Tailholt site southeast of the APE) and one unrecorded resource (a bedrock mortar located northwest of the APE) were found. Three prior cultural resources have occurred within parts of the current APE and another four cultural resource inventories have been previously conducted within the one-mile search radius.[40] In addition, archaeological field surveys of the APE were conducted on September 30, 2020 and December 7, 2020. No cultural resources were identified within the APE.

A search of the Sacred Lands File on file with the Native American Heritage Commission (NAHC) was also requested and resulted in negative results (i.e., no sacred lands were identified in the Project site) in a letter received from the NAHC on June 17, 2020. Pursuant to AB 52 Tulare County RMA staff contacted five Native American Tribes by certified mail on June 18, 2020 regarding the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project. Follow up emails and calls were also made to those tribes on July 28 and July 29, 2020. On August 3, 2020, Shana Powers with Santa Rosa Rancheria responded in an email with potential concerns and would like to be notified of any discoveries. Due to the location, they would also defer to the Tejon and Tule River Tribes. On August 28, 2020, RMA sent follow up emails to the Tule River Tribe as Santa Rosa Rancheria Tribe deferred to the Tule River Tribe. The County further consulted with the Tule River Indian Tribe, which included a site visit in December 2020.

As an abundance of caution, in the unlikely event that subsurface resources are located, **Mitigation Measures CUL-1** through **CUL-3** as specified at Item 5 Cultural Resources would be implemented thereby reducing the potential level of impact to this resource as less than significant for resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or to a resource consider significant to a California Native American tribe. Therefore, the Project would result in a less than significant impact to this resource.

Mitigation Measures: CUL-1 through **CUL-3** (as applicable).

Conclusion: Less Than Significant Impact with Mitigation.

Cumulative Impact Analysis:

Less Than Significant Impact With Mitigation: As noted earlier, one documented resource (the Tailholt site southeast of the APE) and one unrecorded resource (a bedrock mortar located northwest of the APE) were found. Three prior cultural resources have occurred within parts of the current APE and another four cultural resource inventories have been previously conducted

[40] State of California Transportation Agency. Historic Property Survey Report. Page 5. Included in Attachment "C" of the MND

within the one-mile search radius. In addition, an archaeological field survey of the APE was conducted on September 30, 2020 and December 7, 2020. No cultural resources were identified within the APE. **Mitigation Measures CUL-1** through **CUL-3** would reduce impacts to this resource to less than significant.

19.	**UTILITIES AND SERVICE SYSTEMS**				
Would the project:		**SIGNIFICANT IMPACT**	**LESS THAN SIGNIFICANT IMPACT WITH MITIGATION**	**LESS THAN SIGNIFICANT IMPACT**	**NO IMPACT**
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c)	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?	☐	☐	☐	☒
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Project Impact Analysis:

a) Less Than Significant Impact. Construction or Relocation of New Utilities – The Project is proposing replacement of an existing bridge, and therefore no relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, or natural gas, would be needed. The Project will require the relocation of a Frontier Communication overhead telecom lines that closely follows the roadway alignment. The Caltrans utility coordination process will be followed to obtain utility clearance and right of way certification.

Mitigation Measures: None required.

Conclusion: Less Than Significant Impact.

b) No Impact. Water Supplies – The Project is proposing for the replacement of an existing bridge. Thus, it would have no impact on water supplies.

Mitigation Measures: None required.

Conclusion: No Impact.

c) No Impact. Wastewater – The Project is proposing for the replacement of an existing bridge. Thus, no new water, wastewater treatment facilities, or expansion of existing facilities would be required.

Mitigation Measures: None required.

Conclusion: No Impact.

d) Less Than Significant Impact. Solid Waste Generation – The proposed Project is the replacement of an existing bridge. Demolition of the existing bridge upon completion of the new bridge will result in solid waste. However, the Project will be required to comply with County of Tulare Solid Waste Department rules and regulations to properly dispose of demolition waste including disposal of any solid waste at an appropriate landfill that accepts the species of solid waste requiring disposal. Thus, it would result in a less than significant impact to this resource.

Mitigation Measures: None required.

Conclusion: Less Than Significant Impact.

e) No Impact. Solid Waste Regulations – The proposed Project would comply with federal, state, and local statutes and regulations related to solid waste.

Mitigation Measures: None required.

Conclusion: No Impact.

Cumulative Impact Analysis:

Less Than Significant Impact: As noted earlier, the Project will be required to comply with County of Tulare Solid Waste Department rules and regulations to properly dispose of demolition waste including disposal of any solid waste at an appropriate landfill that accepts the species of solid waste requiring disposal. Thus, it would result in a less than significant cumulative impact to this resource.

20. WILDFIRES

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d)	Expose people or structures to significant risks, including downslope or downstream flooding, or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Project Impact Analysis:

a)-d) No Impact. According to CalFire's Fire Hazard Severity Zones in SRA map, the Project area is located in a State Responsibility Area (SRA) with moderate risk.[41] The Project is proposing to replace the existing M109 over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility. Temporary construction easements are needed throughout the Project area and construction staging would take place within County right-of-way and adjacent privately owned parcels. Minor permanent right-of-way acquisitions are anticipated. The existing bridge will remain open throughout construction of the new replacement bridge; as such, the Project will not substantially impair emergency response or evacuation plans.

[41] CalFire Fire Hazard Severity Zones in SRA. Accessed April 2021 at: Map of CAL FIRE's Fire Hazard Severity Zones in State Responsibility Areas – Tulare County

Temporary Best Management Practices (BMPs), including practices for erosion control, would be implemented during construction-related activities. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Map (FIRM), the Project area is designated as Zone A. Zone A indicated high risk flood areas, with a 1% annual chance of flooding. The Project is not located within a Central Valley Flood Protection Board (CVFPB) Designated Floodway (DF) nor is it within 30 feet from a Regulated Stream.[42] In addition, construction and design of the proposed project shall be in compliance with current construction and seismic codes and standards, which would reduce potential seismic hazard risks to acceptable levels. Due to the low frequency of traffic in the area, the Project will not expose people or structures to significant risks in flooding, landslides, post-fire slope instability, or drainage changes.

Mitigation Measures: None required.

Conclusion: No Impact.

Cumulative Impact Analysis:

No Impact: As there will be no Project-level impact, there will be no cumulative impact.

21. MANDATORY FINDINGS OF SIGNIFICANCE

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal species, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a) Less Than Significant with Mitigation. As documented in the NES and this analysis, the Project would have some impacts to sensitive waters and habitats; however, these impacts would be minimal and are not anticipated to degrade the quality of the environment. As noted earlier, the NES notes that after general biological surveys, habitat assessment, and literature review, one special status animal species was determined to have a low to moderate potential to occur within the BSA – the Crotch bumble bee (Bombus crotchii). With the implementation of Project Mitigation Measure BIO-10, the Project will prevent the take of Crotch bumble bee. Therefore, the proposed Project's impacts to biological resources would be less than significant the implementation of Mitigation Measures, BIO-1 through BIO-16, as applicable.

The Project was determined to have no potential to affect historic properties or archeological resources. The Project would not eliminate important examples of the major periods of California history or prehistory. Mitigation Measures CUL-1 through CUL-3 would minimize impacts to Cultural and Tribal Cultural resources.

[42] Water Quality Technical Memorandum. February 2021. Page 11. Prepared by Dokken Engineering and included in Attachment "F" of this MND.

b) **No Impact.** The Project does not have impacts that are "individually limited, but cumulatively considerable." Viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects, none of this Project's impacts would be considered cumulatively significant impacts to the environment.

c) **Less Than Significant.** No substantial adverse effects on human beings, either directly or indirectly, are anticipated. Construction noise would be minimized as it will be short-term, intermittent, temporary; and restricted to day-time and weekday operations. The existing bridge and road segment of M109 over the White River would remain open during the duration of Project construction thereby allowing vehicle movements over the White River without any disruption or detours. Mitigation Measures GEO-1 through GEO-3, HAZ-1 through HAZ-6, NOI-1, and WQ-1 through WQ-5 would be implemented, as applicable, thereby minimizing impacts to these resources.

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Attachment "A"

Visual Impact Assessment

Mountain Road 109 White River Bridge Replacement Project

Visual Impact Assessment Memorandum

Mountain Road 109 White River Bridge Replacement Project

Tulare County, California

District 6 – TUL

BRLS-5946(170)

February 2021

STATE OF CALIFORNIA

Caltrans

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Visual Impact Assessment Memorandum

Mountain Road 109 White River Bridge Replacement Project (for Minor Level VIA)

Tulare County, California

District 6 – TUL

BRLS-5946(170)

February 2021

STATE OF CALIFORNIA

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

Prepared By: _____ Date: 2/1/2021

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Statement of Compliance: Produced in compliance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

1. Purpose of Study and Assessment Method

The purpose of this visual impact assessment (VIA) is to document potential visual impacts caused by the proposed Mountain Road 109 (M109) White River Bridge Replacement Project (Project) and to propose measures to lessen any detrimental impacts that are identified. Visual impacts are demonstrated by identifying visual resources in the Project area, measuring the amount of change that would occur as a result of the Project, and predicting how the affected public would respond to or perceive those changes. This VIA follows the guidance outlined in the publication *Guidelines for the Visual Impact Assessment for Highway Projects* published by the Federal Highway Administration (FHWA) in January 2015.

2. Project Description

Tulare County (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility.

The bridge is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California. The existing bridge was constructed in 1939 and is not eligible for the National Register of Historic Places. The structure is a two span steel girder with timber deck and asphalt over bridge structure supported on spread footings. The bridge measures approximately 40 feet in total length with a total width of 16 feet and clear width between railing of 11 feet.

The bridge is predominantly used by local resident's vehicles and agricultural-related equipment and the roadway narrows to one lane of un-signalized bi-directional traffic over the bridge. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 (out of a potential 100 rating) and was flagged structurally deficient due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads.

Temporary construction easements are needed throughout the project area and construction staging would take place within County right-of-way and adjacent privately owned parcels. Minor permanent right-of-way acquisitions are anticipated.

The total estimated cost to implement the Build Alternative is approximately $2.1 million. The project is included in the Fiscal Years 2019 Federal Transportation Improvement Program (FTIP) and is funded through the 2016/17 – 2021/22 Federal Highway Bridge Program (HBP).

The Build Alternative would replace the existing M109 bridge crossing over White River with a new two-lane bridge structure to match the required minimum width to carry two lanes of traffic. The approximate limits of the project are approximately 500 feet northwest and 300 feet southeast of the existing M109 crossing of White River. The project would conform to the existing roadway width and would provide an improved road alignment for safety. The bridge structure would consist of a concrete slab bridge. The proposed bridge would be approximately 100 feet long and would be no greater than 18 feet in height when measured from the creek bottom.

The White River channel would be graded to restore natural channel contours. Rock slope protection may be necessary around the bridge abutments for scour protection.

Temporary construction easements would be needed for bridge construction and construction staging areas. Permanent slope easements may be required to conform the finished grades of the maintenance roads along each side of the creek to the bridge profile grade. Right-of-way acquisition and utility relocations are anticipated.

M109 and driveway access would remain open during construction. Due to the length of a potential detour route, stage construction would be utilized in order to keep the roadway open to traffic during construction. Construction is anticipated to begin in 2024 and would take approximately 12 months to complete.

The project is subject to both California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) processes. The County is the lead agency under CEQA and Caltrans is the lead agency under NEPA.

3. Project Location and Setting

The Project location and setting provides for the context for determining the type of changes to the existing visual environment. The Project corridor is defined as the area of land that is visible from, adjacent to, and outside Caltrans right-of-way, and is determined by topography, vegetation, and viewing distance.

The proposed Project is located in Tulare County, California, approximately 8 miles southeast of Fountain Springs, within the United States Geological Survey (USGS) 7.5'-quadrangle of White River (Appendix A. Project Figures). The existing bridge is located on M109, approximately 500 feet north of Mountain Road 12. The Project is in the foothills of the southern Sierra Nevada, within the southern Sierra Nevada Foothills (sSNF) Jepson geographic subdivision. The natural landscape is characterized by annual grassland scattered with native oaks and the riparian habitat associated with White River. Land use within the Project area and Project corridor is designated as Foothill Agriculture.

The White River Bridge (Bridge No. 46C-0133) over White River is not eligible for listing on the National Register of Historic Places (NRHP). No designated scenic vistas are at or near the Project site. M109 is not a designated Scenic Highway in the National Scenic Byways Program nor is it a State Scenic Highway. There are no Wild and Scenic Rivers within the proposed Project corridor.

4. Visual Resources and Resource Change

Visual resources of the Project setting are defined and identified below by assessing *visual character* and *visual quality* in the Project corridor. *Resource change* is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the Project corridor before and after the construction of the proposed Project.

The visual character of the proposed Project will be compatible with the existing visual character of the corridor. M109 runs for approximately 22 miles within the southern Sierra Nevada foothills. Approximately 0.42 miles of M109 are within the Project area. For the majority of M109, the visual character is dominated by natural vegetation; however, this is broken up by scattered agricultural and residential structures. Specifically, within the Project area, there are existing properties and

roadways which currently disrupt the natural character of the landscape. The contours of the foothills and the existing roadways dominate the visual character of the area including the form, line, color, and texture of the visual environment. The proposed Project would require the removal of a portion of riparian vegetation within the proposed Project alignment; however, this minor removal would not drastically alter the form, line color or texture of the visual character of the area.

The proposed Project would remove the existing bridge (40-foot long by 16-foot wide) and replace it with a two-lane concrete slab bridge, approximately 100 feet long. The new bridge would be approximately 2,300 square feet larger than the existing bridge. The new alignment would move the bridge approximately 20 feet west of the existing location, removing some natural vegetation within the new bridge and roadway footprint. With the removal of the existing bridge and replacement of the larger bridge, a moderate change of the visual resources would occur; however, these changes would not drastically alter the form, line, color and texture of the visual character of the area.

Pattern elements of form, line, color, and texture would remain intact through the proposed Project corridor. Therefore, visual character of the proposed Project area would be compatible with the existing visual character of the area.

- Form elements (rolling agricultural and natural foothills) would remain intact;
- Line elements (roadways and riparian corridor) would remain similar as a result of the new road alignment and minor impacts to riparian habitat;
- Color elements (seasonally green and brown composition of trees, riparian areas, and annual grasslands) would remain intact; and
- Texture elements (annual grasslands with scattered oaks and riparian corridor) would remain similar to the existing setting as a result of the minor impacts to natural communities.

The visual quality of the existing corridor will not be altered by the proposed Project. The vividness of the Project site is considered moderate due to the continuous grassland covered foothills, small riparian area, and adjacent rural properties and structures. The intactness of the site is moderate due to amount of existing agricultural landscape and the man-made roadway. Unity of the site is moderately high, as the areas adjacent to the Project area are dominated by natural vegetation (annual grassland and riparian area associated with White River), but this is disrupted by rural and agricultural structures and grazing activity within the Project area.

Resource Change (changes to visual resources as measured by changes in visual character and visual quality) will be low. Visual character and quality of the proposed Project will be similar to the existing visual character and quality of the Project area in its current state (Appendix B. Representative Photographs).

5. Viewers and Viewer Response

Neighbors (people with views *to* the road) and *highway users* (people with views *from* the road) have potential to be affected by the proposed Project. For the neighbor's viewer group, the local rural-residential neighbor's viewer exposure would be considered low as there is only one property utilized as a full-time residence within or adjacent to the Project area. Furthermore, this

residence is located approximately 0.16 miles south of the existing M109 bridge and the view of the new bridge would be blocked by the hilly topography between the residence and the bridge. The awareness of the residents of this property was rated high due to the location of the Project, in close proximity and on one of only two access roads to this property. The duration of these viewers is high, due to their long term and constant presence in the area.

Neighbor's response to visual changes would be considered low. They have a moderate rating of sensitivity due to the proximity to M109 and the amount of time spent in the area; however, there would only be a low degree of change to views. The awareness of this group is considered high, as the proposed Project is occurring within a quarter mile of the residential property and the residents currently utilize M109 for access to their property. However, the aesthetics of the Project area is unlikely to be highly valued by the residents considering the existing level of urban infrastructure (road and bridge) within the existing rural area.

For highway users, viewer exposure is moderately-high. The location of the motorists is rated high, as the motorists would travel along the newly aligned roadway and bridge replacement. The quantity of motorists that would travel this section of the road would be low as the corridor is anticipated to be used predominately by residents' vehicles and agricultural equipment. The duration of these viewers would be moderately-low, due to the rate of speed (approximately 15 miles per hour) that vehicles using the road would operate, and the relatively short length of the of the Project segment (approximately 625 feet), including roadway approaches and new bridge structure.

The highway users viewer group would have low sensitivity due to the short time span spent along the proposed Project. The highway users' activity level within the Project area is high as they are traveling on the roadway and not able to be engaged in observing their surroundings. The awareness of the motorists' surroundings is low as it is focused on the roadway, not the surrounding foothill environment. The aesthetics of the Project area by motorists is to be outweighed by the existing level of visual character and quality.

As such, it is anticipated that the average response of all viewer groups would be low.

6. Visual Impact

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. The Project is expected to have minimal permanent and temporary visual impacts from Project construction. The Project is characterized to have an overall visual impact of low. In consideration of the no-build alternative, not replacing the M109 over White River bridge would result in continued safety issues of the structurally deficient bridge. The proposed Project would replace the substandard bridge with a structure meeting current standards and realign the approach roadway to support the new bridge. Since the Project does not change the existing land uses and would result in a minor addition of new paved surfaces, the visual character would not change substantially.

An area of riparian woodland vegetation is found within the proposed Project area. This area is comprised of native and non-native vegetation including willows (*Salix spp.*), California buckeye (*Aesculus californica*), California sycamore (*Platanus racemosa*), elderberry (*Sambucus sp.*) and stinging nettle (*Urtica dioica*). While some riparian habitat would be removed, this would not substantially change the visual quality of the site. As a wooded area, numerous trees would remain in view of the replacement bridge, and, to the extent possible, all trees along the edge of construction would be trimmed rather than removed. All temporary impacts to riparian areas would

be re-contoured to pre-construction conditions and re-vegetated with a native seed mix. Permanent impacts will be mitigated through an agency approved mitigation ratio at an on or off-site agency approved location or a combination of both. The Project would not affect light and glare substantially. No new lighting is proposed.

7. Avoidance and Minimization Measures

Avoidance or minimization measures have been identified and can lessen visual impacts caused by the Project. This section describes avoidance and/or minimization measures to address specific visual impacts. These will be designed and implemented with concurrence of the District Landscape Architect.

The following measures to avoid or minimize visual impacts will be incorporated into the Project:

VIA-1: Landscape architecture considerations shall be implemented as directed by the Department's Highway Design Manual, Chapter 900, and the Department's Landscape Architecture PS&E Guide. As such, highway planting, lighting plans, and aesthetic treatment would be incorporated into the Project as appropriate. This would also include coordination between the Department's Landscape Architecture staff for areas within state right-of-way as well as with County of Tulare.

VIA-2: Caltrans Standard Specifications (2018) "Erosion Control" will be followed during construction. At the conclusion of construction, areas of bare soil shall be hydroseeded with native seed mix to prevent or at least minimize erosion. Hydroseeding will follow Standard Special Provision 21-2.03D for Erosion Control (Hydroseed).

VIA-3: Vegetation clearing would only occur within the delineated Project boundaries in an effort to minimize the impacts. Trees located in areas along the edge of the construction zone would be trimmed whenever possible and only those trees that lie within the active construction areas would be removed.

VIA-4: All disturbed areas including staging of vehicles and equipment will be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native species.

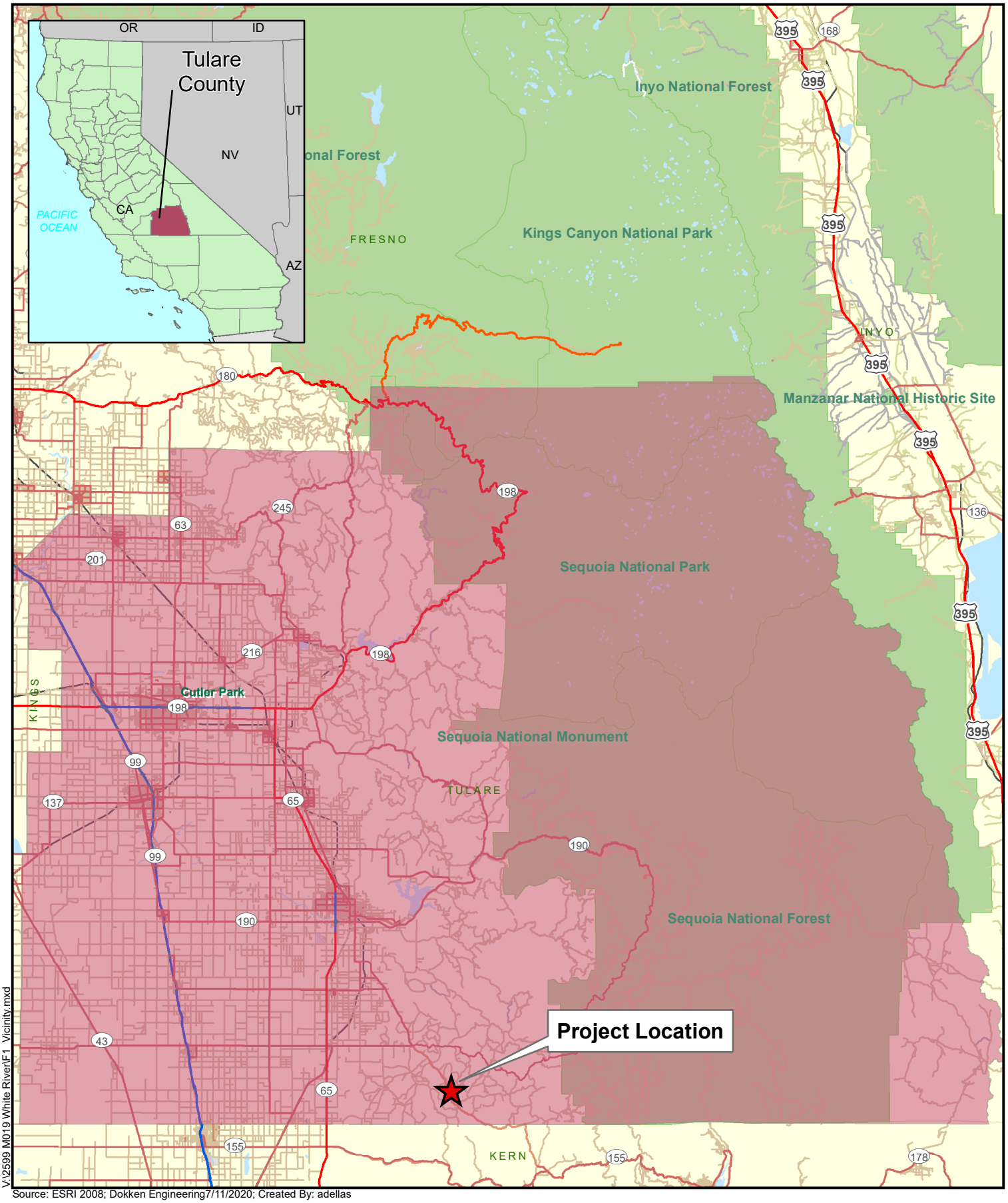
VIA-5: Permanent impacts to riparian vegetation within construction limits will be mitigated for at an agency approved mitigation ratio at an on or off-site agency approved location or a combination of both.

VIA-6: The contractor will be required to maintain good housekeeping in and around construction sites, staging areas, and equipment storage areas.

8. Conclusions

The M109 White River Bridge Replacement Project would result in minimal visual impacts. Since the Project replaces an existing bridge and the footprint stays close to the existing roadway and bridge, there would be less than significant changes in visual character and quality. These changes would be additionally reduced by the avoidance and minimization measures that will be incorporated into the Project design.

Appendix A. Project Figures

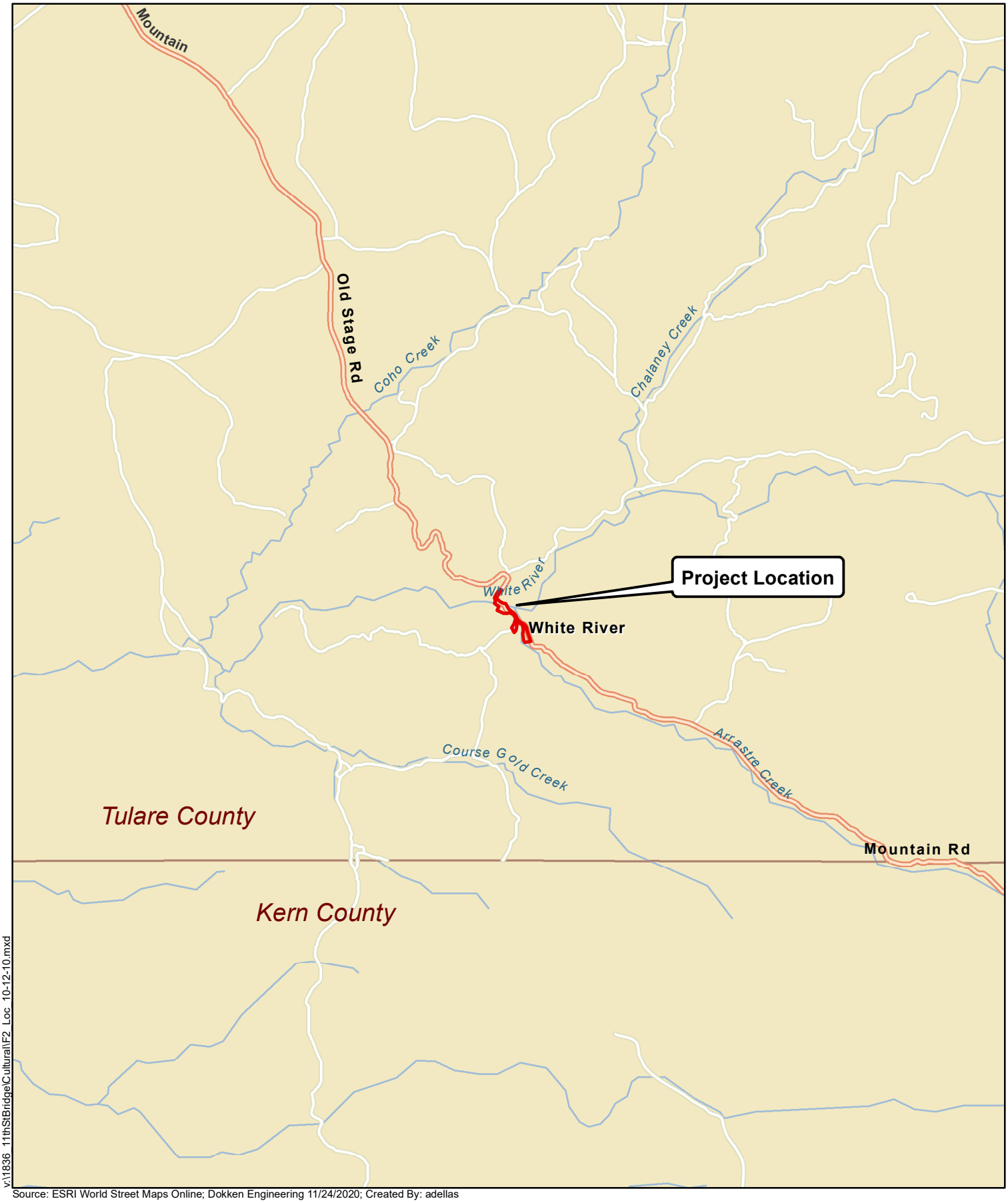


V:\2599 M019 White River\F1 Vicinity.mxd

Source: ESRI 2008; Dokken Engineering7/11/2020; Created By: adellas

0 5 10 15 Miles

FIGURE 1
Project Vicinity
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California



v:\1836_11thStBridge\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 11/24/2020; Created By: adellas

0 0.5 1 1.5 2 Miles

FIGURE 2
Project Location
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California

V:\2599 M019 White River\F3_ProjectFeatures_2020-11-25.mxd

Source: ESRI Maps Online; Dokken Engineering 11/25/2020; Created By: adellas

1 inch = 125 feet

0 130 260 390 520 Feet

Figure 3. Project Features

BRLS-5946(170)

M109 over White River Bridge Replacement Project

White River, Tulare County, California

Appendix B. Representative Photographs

Photograph 1. Northwest-facing view of existing M109 over White River Bridge, taken from the western slopes just south of the existing bridge. The fencing is a part of a non-residential property located within the Project area. Note the riparian vegetation along White River.

Photograph 2. Close up northwest-facing view of existing M109 over White River Bridge, taken from the southern end of the bridge.

Photograph 3. Northwest-facing view of M109, taken from the northern side of the existing M109 over White River Bridge. Photograph is representative of the view of north-bound travelers. Note the riparian vegetation to the west and the rocky annual grassland to the east.

Photograph 4. South-facing view of the single property utilized as a residence within the Project area. Photograph taken from just north of the intersection between M109 and Mountain Road 12, southeast of the existing M109 over White River Bridge.

Photograph 5. Northwest-facing view of M109, taken from just north of the M109 and Mountain Road 12 intersection. Photograph is representative of the view of M109 from the residential property located within the Project area. Note the lack of direct visual to the existing M109 over White River bridge due to the hilly topography of the area.

Attachment "B"

Natural Environment Study (Minimal Impacts)

Natural Environment Study (Minimal Impacts)

Mountain Road 109 White River Bridge Replacement Project

Tulare County, California

District 6 – TUL

BRLS-5946(170)

February 2021

STATE OF CALIFORNIA

Caltrans

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Natural Environment Study (Minimal Impacts)

Mountain Road 109 White River Bridge Replacement Project

Tulare County, California

District 6 – TUL

BRLS-5946(170)

February 2021

STATE OF CALIFORNIA
Department of Transportation
Tulare County Resource Management Agency

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Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

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List of Acronyms

BMPs	Best Management Practices
BSA	Biological Study Area
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG	California Fish and Game
CFR	Code of Federal Regulations
County	Tulare County
CWA	Clean Water Act
EFH	Essential Fish Habitat
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FESA	Federal Endangered Species Act
FHWA	Federal Highways Administration
FTIP	Federal Transportation Improvement Program
HBP	Highway Bridge Program
HMMP	Habitat Mitigation and Monitoring Plan
M109	Mountain Road 109
MBTA	Migratory Bird Treaty Act
MMRP	Mitigation Monitoring and Report Program
NEPA	National Environmental Policy Act
NESMI	Natural Environment Study Minimal Impacts
NMFS	National Marine Fisheries Service
OHWM	Ordinary high-water mark
PJD	Preliminary jurisdictional delineation
Project	M109 White River Bridge Replacement Project

RWQCB	Regional Water Quality Control Board
SD	Structurally Deficient
TCAG	Tulare County Association of Governments
U.S.	United States
U.S.C.	United States Code
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geographic Survey

Summary

Tulare County (County), in coordination with the California Department of Transportation (Caltrans), proposed to construct a new bridge on Mountain Road 109 (M109) over White River in unincorporated Tulare County, California as the M109 White River Bridge Replacement Project (Project). This Project would replace the existing one lane bridge with a new two-lane bridge structure to match the required minimum width to carry two lanes of traffic. The new bridge would be located approximately 20 feet west of the existing bridge and the roadway would be realigned to a straighter alignment. This Natural Environment Study Minimal Impacts (NESMI) discusses the biological resources found within and immediately adjacent to the Project's impact area, as well as habitat impacts and Project mitigation.

The Project would have temporary and permanent impacts to sensitive natural communities within the Project impact area. Due to the construction of a new bridge and new approach roadways, the Project would permanently impact approximately 0.074 acres of White River, 0.0002 acres of wetland habitat, and 0.106 acres of riparian woodland. In addition, the Project would temporarily impact approximately 0.048 acres of White River, 0.014 acres of seasonal wetland, and 0.226 acres of riparian woodland. Permanent and temporary impacts would be reduced to the extent feasible via the incorporation of avoidance and minimization measures into the Project design. In addition, mitigation would occur through payment of an in-lieu fee to an agency approved mitigation bank for aquatic resources and on-site rehabilitation efforts for sensitive natural communities. Detailed mitigation measures have been included in this NESMI which would mitigate for all impacts to sensitive natural communities.

Literature review, habitat assessments, and biological surveys determined that one special status wildlife species has the potential to occur within the Project Biological Study Area (BSA) – the Crotch bumble bee (*Bombus crotchii*). The species has a low to moderate potential to occur within the Project BSA. In addition, the Project's impact area avoids suitable habitat areas for the Crotch bumble bee, reducing the potential for impacts to the species. With the implementation of avoidance, minimization, and mitigation measures included in this NESMI, direct and cumulative impacts to the Crotch bumble bee (and any other special status species) are not anticipated.

As the Project is anticipated to affect jurisdictional waters of the United States, waters of the state, and associated CDFW jurisdictional riparian habitat within the BSA, the Project will require regulatory permitting from the United States Army Corps of Engineers (USACE), the Central Valley Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW). Permits required include a §1602 Streambed Alteration Agreement (from CDFW), a §401 Water Quality Certification (from RWQCB), and a §404 permit (from USACE), which would be obtained prior to construction.

1. Introduction

Tulare County, in cooperation with Caltrans, is proposing to replace the existing M109 over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility.

The bridge is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California (Figure 1. Project Vicinity; Figure 2. Project Location). The existing bridge was constructed in 1939 and is not eligible for the National Register of Historic Places. The structure is a two-span steel girder with timber deck and asphalt over bridge structure supported on spread footings. The bridge measures approximately 40 feet in total length with a total width of 16 feet and clear width between railing of 11 feet.

The bridge is predominantly used by local residents' vehicles and agricultural-related equipment and the roadway narrows to one lane of un-signalized bi-directional traffic over the bridge. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 (out of a potential 100 rating) and was flagged structurally deficient due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads.

Temporary construction easements are needed throughout the Project area and construction staging would take place within County right-of-way and adjacent privately owned parcels. Minor permanent right-of-way acquisitions are anticipated.

The total estimated cost to implement the Build Alternative is approximately $2.1 million. The Project is included in the Fiscal Years 2019 Federal Transportation Improvement Program (FTIP) and is funded through the 2016/17 – 2021/22 Federal Highway Bridge Program (HBP).

1.1 Project History

1.1.1 Purpose

The purpose of the Project is to:

- Replace the existing M109 over White River Bridge with a new two-lane bridge;
- Provide a structure that meets current design standards;
- Provide improved safety and operations on the facility; and
- Provide improved access for local use of agricultural equipment.

1.1.2 Need

The Project is needed because the existing bridge has a sufficiency rating of 4.5 and was flagged structurally deficient due to the bridge's low load carrying capacity. The existing bridge is narrow and only capable of carrying 1 lane of traffic.

1.2 Project Description

The Build Alternative would replace the existing M109 bridge crossing over White River with a new two-lane bridge structure to match the required minimum width to carry two lanes of traffic.

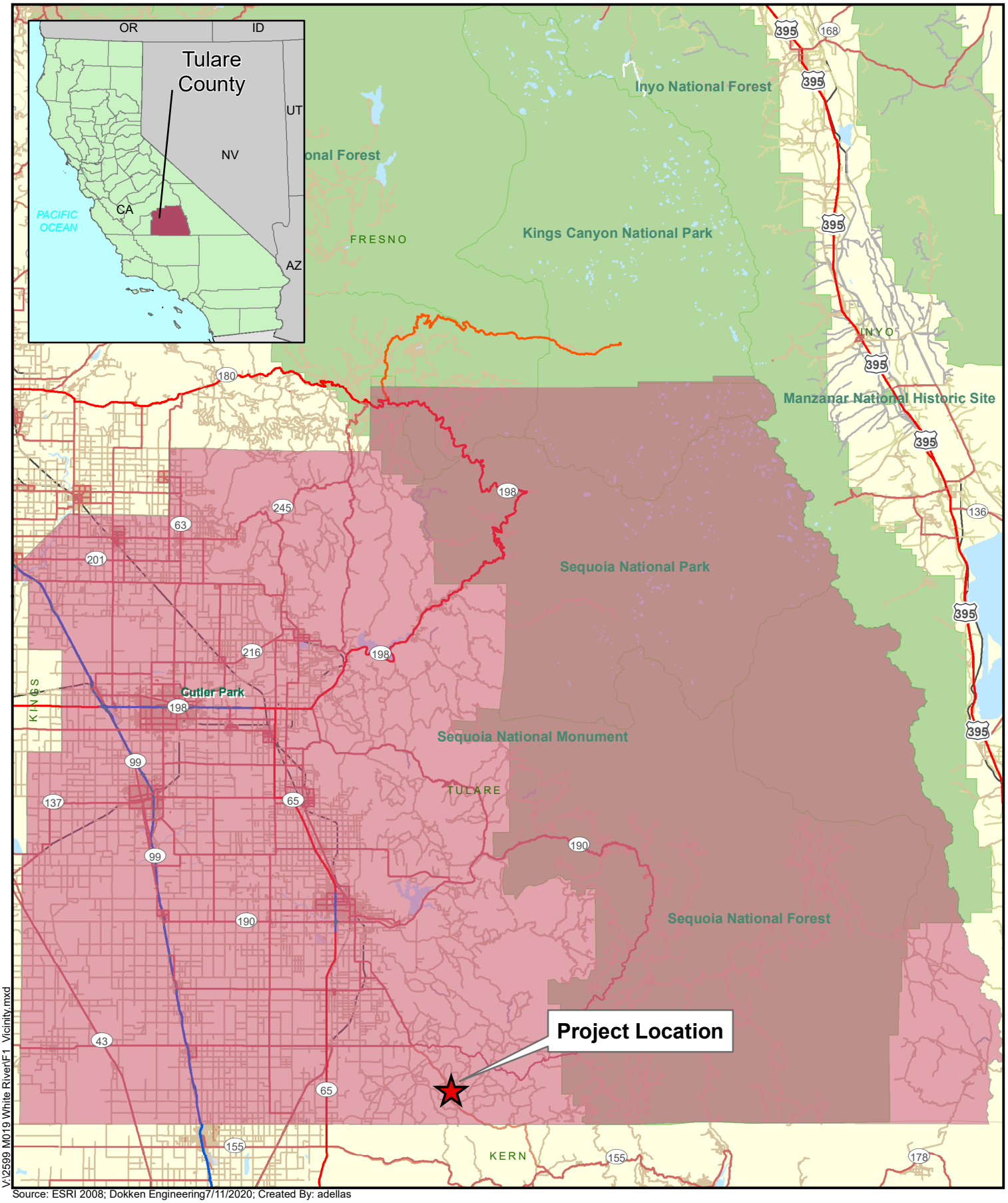
The approximate limits of the Project are approximately 500 feet northwest and 300 feet southeast of the existing M109 crossing of White River. The Project would conform to the existing roadway width and would provide an improved road alignment for safety. The bridge structure would consist of a concrete slab bridge. The proposed bridge would be approximately 100 feet long and would be no greater than 18 feet in height when measured from the creek bottom.

The White River channel would be graded to restore natural channel contours. Rock slope protection may be necessary around the bridge abutments for scour protection.

Temporary construction easements would be needed for bridge construction and construction staging areas. Permanent slope easements may be required to conform the finished grades of the maintenance roads along each side of the creek to the bridge profile grade. Right-of-way acquisition and utility relocations are anticipated.

M109 and driveway access would remain open during construction. Due to the length of a potential detour route, stage construction would be utilized in order to keep the roadway open to traffic during construction. Construction is anticipated to begin in 2024 and would take approximately 12 months to complete.

The Project is subject to both California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) processes. The County is the lead agency under CEQA and Caltrans is the lead agency under NEPA.

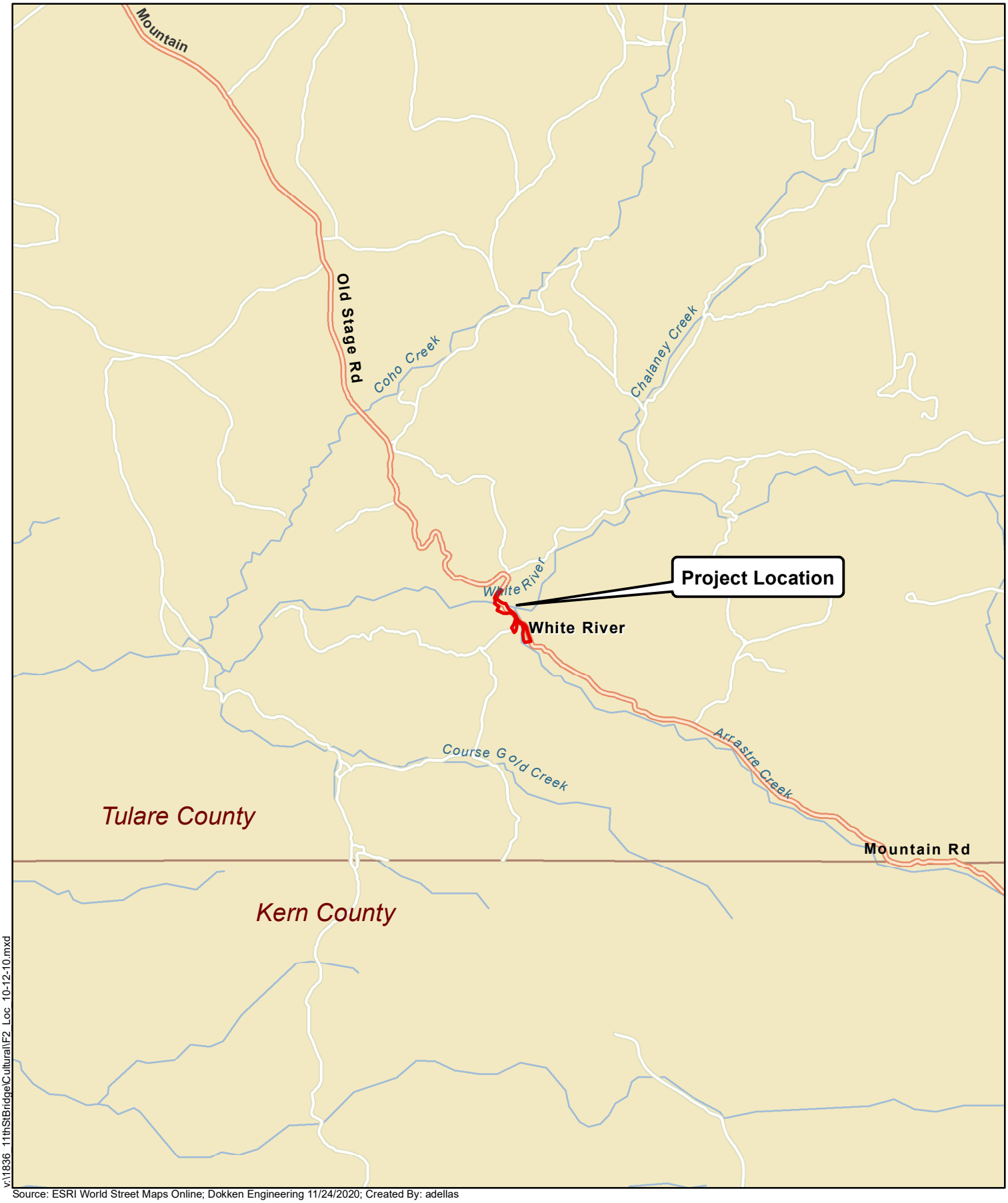


V:\2599 M019 White River\F1 Vicinity.mxd

Source: ESRI 2008; Dokken Engineering7/11/2020; Created By: adellas

0 5 10 15 Miles

FIGURE 1
Project Vicinity
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California



v:\1836_11thStBridge\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 11/24/2020; Created By: adellas

0 0.5 1 1.5 2 Miles

FIGURE 2
Project Location
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California

2. Study Methods

2.1 Regulatory Requirements

This section describes the general Federal, State, and local plans, policies, and laws that are relevant to biological resources within the Project impact area.

2.1.1 Federal Regulations

National Environmental Policy Act

The NEPA provides an interdisciplinary framework for environmental planning by Federal agencies and contains action-forcing procedures to ensure that Federal agency decision makers take environmental factors into account. NEPA applies whenever a Federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect environmental resources. Caltrans is the designated NEPA lead agency for this Project acting under delegation from Federal Highways Administration (FHWA).

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 (16 United States Code [U.S.C.] §1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to §4 of the Act (16 U.S.C. §1533) and the ecosystems upon which they depend. These species and resources have been identified by the United States Fish and Wildlife Service (USFWS) or the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS).

Clean Water Act

The Clean Water Act (CWA) was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to Waters of the United States (U.S.). CWA serves as the primary Federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. CWA empowers the U.S. Environmental Protection Agency (EPA) to set national water quality standards and effluent limitations, and includes programs addressing both point-source and non-point-source pollution. Point-source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Non-point-source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is CWA's primary regulatory tool.

The RWQCB has jurisdiction under §401 of CWA and regulates any activity which may result in a discharge to Waters of the United States. The RWQCB also asserts authority over "waters of the State" under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act.

Executive Order 13112: Prevention and Control of Invasive Species

Executive Order (EO) 13112 (signed February 3, 1999) directs all Federal agencies to prevent and control introductions of invasive species in a cost-effective and environmentally sound manner. The EO and directives from the FHWA require consideration of invasive species in NEPA analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

Executive Order 13186: Migratory Bird Treaty Act

EO 13186 (signed January 10, 2001) directs each Federal agency taking actions that could adversely affect migratory bird populations to work with USFWS to develop a Memorandum of Understanding that will promote the conservation of migratory bird populations. Protocols developed under the Memorandum of Understanding will include the following agency responsibilities:

- avoid and minimize, to the maximum extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- restore and enhance habitat of migratory birds, as practicable; and
- prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist Federal agencies in their efforts to comply with the Migratory Bird Treaty Act (MBTA) [50 Code of Federal Regulations (CFR) 10 and 21] and does not constitute any legal authorization to take migratory birds. Take is defined under the MBTA as "the action of or attempt to pursue, hunt, shoot, capture, collect, or kill" (50 CFR 10.12) and includes intentional take (i.e., take that is the purpose of the activity in question) and unintentional take (i.e., take that results from, but is not the purpose of, the activity in question).

2.1.2 State Regulations

California Environmental Quality Act (CEQA)

The CEQA is a State law created to inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities and to work to reduce these negative environmental impacts. Tulare County is the CEQA lead agency for this Project.

California Endangered Species Act

The California Endangered Species Act (CESA) [California Fish and Game (CFG) Code §2050 et seq.] requires the CDFW to establish a list of endangered and threatened species (§2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (§2080-2089). In addition, CESA prohibits take of candidate species (under consideration for listing).

CESA also requires CDFW to comply with CEQA (Pub. Resources Code §21000 et seq.) when evaluating incidental take permit (ITP) applications (CFG Code §2081(b) and California Code Regulations, Title 14, §783.0 et seq.), and the potential impacts the project or activity for which the application was submitted may have on the environment. CDFW's CEQA obligations include consultation with other public agencies which have jurisdiction over the project or activity [California Code Regulations, Title 14, §783.5(d)(3)]. CDFW cannot issue an ITP if issuance would jeopardize the continued existence of the species [CFG Code §2081(c); California Code Regulations, Title 14, §783.4(b)].

Section 1602: Streambed Alteration Agreement

Under CFG Code 1602, public agencies are required to notify CDFW before undertaking any project that would "divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank or, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into

any river, stream, or lake." Preliminary notification and project review generally occurs following the environmental review phase. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resources. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project.

Section 3503 and 3503.5: Bird and Raptors

CFG Code §3503 prohibits the destruction of bird nests and §3503.5 prohibits the killing of raptor species and destruction of raptor nests. Trees and shrubs are present in and adjacent to the Project area and could contain nesting sites.

Section 3513: Migratory Birds

CFG Code §3513 prohibits the take or possession of any migratory non-game bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

2.1.3 Local Regulations

Tulare County General Plan (Chapter 8)

In order to protect natural and cultural resources, Tulare County has outlined a series of policies in the 2030 General Plan which aim to protect sensitive natural habitats, biodiversity, and the health of the County's ecosystems (Tulare County 2020). Such policies include, but are not limited to:

- ERM-1.1: Protection of Rare and Endangered Species. The County shall ensure the protection of environmentally sensitive wildlife and plant life, including those species designated as rare, threatened, and/or endangered by State and/or Federal government, through compatible land use development.

- ERM-1.2: Development in Environmentally Sensitive Areas. The County shall limit or modify proposed development within areas that contain sensitive habitat for special status species and direct development into less significant habitat areas. Development in natural habitats shall be controlled so as to minimize erosion and maximize beneficial vegetative growth.

- ERM-1.4: Protect Riparian Areas. The County shall protect riparian areas through habitat preservation, designation as open space or recreational land uses, bank stabilization, and development controls

- ERM-1.6: Management of Wetlands. The County shall support the preservation and management of wetland and riparian plant communities for passive recreation, groundwater recharge, and wildlife habitats.

- ERM-1.12: Management of Oak Woodland Communities. The County shall support the conservation and management of oak woodland communities and their habitats.

- ERM-1.17: Conservation Plan Coordination. The County shall coordinate with local, State, and federal habitat conservation planning efforts (including Section 10 Habitat

Conservation Plan) to protect critical habitat areas that support endangered species and other special-status species.

Tulare County Association of Governments

The Tulare County Association of Governments (TCAG) reviews CEQA and NEPA documents, as well as proposals that would impact environmental issues in the County. TCAG has established a mitigation bank and a Mitigation Monitoring and Report Program (MMRP) for the County (TCAG 2018). The MMRP describes mitigation measures that will be incorporated into transportation and land use projects, as well as a plan for TCAG to monitor the implementation of these measures.

2.2 Studies Required

2.2.1 Literature Search

On November 3, 2020, species lists were obtained from USFWS IPaC, CDFW's CNDDB, and the CNPS Inventory of Rare and Endangered Plants (Appendix A. USFWS Species List; Appendix B. CNDDB Species List; Appendix C. CNPS Species List). The USFWS IPaC list was obtained using a shapefile of the Project impact area. The CNDDB and CNPS lists were obtained with a nine-quadrangle search of the USGS 7.5' quadrangles California Hot Springs (3511886), Gibbon Peak (3511887), Fountain Springs (3511888), Posey (3511876), White River (3511877), Quincy School (3511878), Glennville (3511866), Woody (3511867), and Sand Canyon (3511868),

2.2.2 Field Reviews

On September 30, 2020, Caltrans and Dokken Engineering conducted a field review at the Project site in which Project plans and technical studies were discussed.

2.2.3 Survey Methods

2.3 Personnel and Survey Dates

On April 1, 2020, April 23, 2020, and May 14, 2020, Dokken Engineering biologist Andrew Dellas conducted general biological surveys, wetland delineations, and protocol special status plant surveys (Appendix D. Botanical Survey Report). General biological surveys and protocol special status plant surveys were conducted by walking meandering transects throughout the entire Project impact area plus a 50 to 100-foot buffer where accessible, henceforth referred to as the Project Biological Study Area (BSA). The surveying biologist noted all plant and wildlife species observed, habitat types, and any potential special status species within the area. Any potential special status plant species were assessed using a dichotomous key. In addition, a preliminary jurisdictional delineation (PJD) was conducted in accordance with *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual* (USACE 2008a), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008b) (Appendix E. Aquatic Resource Delineation Report). Delineation of the OHWM of the White River channel, associated wetlands, and associated riparian habitat was completed with the use of USACE delineation manuals, aerial photography, and field observations. Observed OHWM, and wetland features were mapped in the field with a R1 GNSS Receiver and ArcGIS software.

2.4 Agency Coordination and Professional Contacts

2.4.1 United States Fish and Wildlife Service

On November 3, 2020, a list of special status plants that may occur within the Project's vicinity was obtained from the USFWS IPaC (Appendix A).

The Project is located outside of NMFS jurisdiction; therefore, a NMFS species list is not required and no impacts to NMFS species are anticipated.

2.4.2 California Department of Fish and Wildlife

On November 3, 2020, a list of special status plants and animals that may occur within the Project's vicinity was obtained from the CDFW CNDDB (Appendix B).

2.4.3 California Native Plant Society

On November 3, 2020, a list of special status plants that may occur within the Project's vicinity was obtained from the CNPS Inventory of Rare and Endangered Plants (Appendix C).

2.5 Limitations That May Influence Results

General biological surveys and special status plant surveys were conducted in April and May, during the typical blooming season, and during ideal weather conditions, and are not subject to seasonal or climactic limitations. In addition, the surveys conducted were in compliance with CDFW's special status plant survey protocol and are also not subject to methodical limitations.

3. Results: Environmental Setting

The Project is located in the foothills of the southern Sierra Nevada, within the southern Sierra Nevada Foothills (sSNF) Jepson geographic subdivision (Jepson 2020). This region is characterized floristically by the presence of blue oak and foothill pine woodlands, chaparral, and serpentine habitats. Land use within the Project area is designated as Foothill Agriculture (Tulare County 2020).

3.1 Description of the Existing Physical and Biological Conditions

3.1.1 Study Area

The Biological Study Area (BSA) is defined as the entire Project impact area and staging areas, as well as a 50- to 100-foot buffer around this zone, dependent on accessibility of the surrounding area (Figure 3. Project Study Area). The Project impact area is approximately 6.64 acres and includes all areas that would be temporarily or permanently impacted by the Project, and includes the location of the bridge, construction easements, potential staging areas, and access roads.

3.1.2 Physical Conditions

The elevation within the BSA ranges from approximately 1,080 to 1,150 feet above mean sea level. In the vicinity, the average annual temperatures range from a high of 70 degrees Fahrenheit to a low of 38 degrees Fahrenheit. The average annual precipitation is 17.87 inches (U.S. Climate Data 2020). The topography within the BSA is hilly, located in the cismontane foothills of the Sierra Nevada. Soil within the Project impact area consists of Blasingame sandy loam, 15 to 30 percent slopes (24.3%), Blasingame sandy loam, 30 to 50 percent slopes (57.1%), and Cieneba-Rock outcrop complex, 15 to 75 percent slopes (18.6%) (Appendix F. NRCS Soil Resource Report).

3.1.3 Biological Conditions

The BSA is composed of five different land cover types – urban/barren, annual grassland, riparian woodland, seasonal wetland, and riverine (Figure 4. Waters and Vegetation Communities within the Project Area). The area is disturbed in some locations, particularly the urban/barren areas and within sections of the annual grassland that are currently used for livestock grazing. The riparian, wetland, and riverine habitats are relatively undisturbed and support native plant and local wildlife species. Plant species observed are listed in Table 1 and described in the vegetation community sections below. Wildlife species observed are listed in Table 2.

Table 1. Plant Species Observed

Common Name	Scientific Name	Native (N) / Non-native (X)
Ferns		
Goldback fern	*Pentagramma triangularis*	N
Grasses		
Compact brome	*Bromus madrintensis*	X
Foxtail barley	*Hordeum murinum*	X – [moderate]
Ripgut brome	*Bromus diandrus*	X – [moderate]
Soft chess brome	*Bromus hordeaceus*	X – [limited]
Herbs		
Bedstraw	*Galium sp.*	N
Blue water-speedwell	*Veronica anagallis-aquatica*	X
Bristly fiddleneck	*Amsinckia tessellata*	N
California goosefoot	*Chenopodium californicum*	N
California mugwort	*Artemisia douglasiana*	N
Caterpillar scorpionweed	*Phacelia cicutaria*	N
Chick lupine	*Lupinus microcarpus*	N
Common chickweed	*Stellaria media*	X
Curly dock	*Rumex crispus*	X – [limited]
Cutleaf gernanium	*Geranium dissectum*	X – [limited]
Deerweed	*Acmispon glaber*	N
Fiesta flower	*Pholistoma auritum*	N
Jimsonweed	*Datura wrightii*	N
Milk thistle	*Silybum marianum*	X – [limited]
Miner's lettuce	*Claytonia parviflora*	N
Queen Anne's lace	*Daucus carota*	X
Red stem filaree	*Erodium cicutarium*	X – [limited]
Rough cocklebur	*Xanthium strumarium*	N
Rusty popcornflower	*Plagiobothrys nothofulvus*	N
Sky lupine	*Lupinus nanus*	N
Spearmint	*Mentha spicata*	X
Spike rush	*Eleocharis sp.*	N
Stinging nettle	*Urtica dioica*	N
Sweetclover	*Melilotus sp.*	X
Tumble mustard	*Sisymbrium altissimum*	X
Water smartweed	*Persicaria amphibia*	N
Shrubs		
Azalea	*Rhododendron sp.*	N
Elderberry	*Sambucus sp.*	N
Mule fat	*Baccharis salicifolia*	N
Silver bush lupine	*Lupinus albifrons*	N
Trees		
California buckeye	*Aesculus californica*	N
California sycamore	*Platanus racemosa*	N
Fig	*Ficus sp.*	X
Gooding's willow	*Salix gooddingii*	N
Interior live oak	*Quercus wislizeni*	N
Red willow	*Salix laevigata*	N
Tree of heaven	*Ailanthus altissima*	X – [moderate]
Valley oak	*Quercus lobata*	N

Figure 3. Project Study Area
BRLS-5946(170)
M109 over White River Bridge Replacement Project
White River, Tulare County, California

Figure 4. Waters and Vegetation Communities within the Project Area

BRLS-5946(170)
M109 over White River Bridge Replacement Project
White River, Tulare County, California

Urban/Barren

Urban and barren land within the BSA consists of roadways, road shoulders, man-made structures, and all other land which has been heavily disturbed by human activity within the Project area. Much of the southeastern section of the Project area is composed of urban/barren land due to activity on the residential property in the area, including livestock grazing. Vegetation in this land cover type is either highly disturbed, ornamental, or nonexistent. Within the Project impact area, urban/barren land makes up approximately 4.44 acres (~65%).

Annual Grassland

Annual grassland within the BSA is largely composed of non-native and invasive grass species, including compact brome (*Bromus madritensis*), foxtail barley (*Hordeum murinum*), ripgut brome (*B. diandrus*), and soft chess brome (*B. hordeaceus*). These species are common dominants in non-native annual grasslands across California. This community also contains scattered oak trees (*Quercus spp.*) throughout, as the area transitions to native oak savanna habitat outside of the BSA. In addition, a number of flowering herbs are found throughout this annual grassland. Species include lupins (*Lupinus spp.*), Queen Anne's lace (*Daucus carota*), rusty popcornflower (*Plagiobothrys nothofulvus*), and bristly fiddleneck (*Amsinckia tessellata*). Many of these forbs are native, in contrast with the invasive grass species that dominate the landscape. A portion of the annual grassland within the BSA is disturbed by urban structures and grazing activity. Within the Project impact area, annual grassland makes up approximately 1.45 acres (~21%).

Riparian Woodland

Riparian woodland is found within the BSA along the White River channel. This riparian corridor is densely vegetated, with the canopy dominated by trees such as willows (*Salix spp.*), California buckeye (*Aesculus californica*), and California sycamore (*Platanus racemosa*). The understory is composed of mostly native shrubs and herbs, including elderberry (*Sambucus sp.*) and stinging nettle (*Urtica dioica*). Within the Project impact area, riparian woodland makes up approximately 0.73 acres (~11%).

Seasonal Wetland

Seasonal wetland habitat occurs in a small area immediately adjacent to the White River channel just west of the existing M109 bridge. This habitat is composed of wetland plant species such as spike rush (*Eleocharis sp.)* and water smartweed (*Persicaria amphibia*). Some of these species mix into riverine habitat due to their affinity for inundated habitats and the seasonality of the river channel. Within the Project impact area, seasonal wetland makes up approximately 0.02 acres (<1%).

Riverine

In the BSA, riverine habitat occurs within the OHWM of the White River channel. The riverine channel is sandy and shallow, and water flows seasonally. When the channel is wetted, aquatic species such as water smartweed and blue water-speedwell (*Veronica anagallis-aquatica*) grow within and along the edges of the channel. The channel is shaded by the existing bridge on M109 and the tall canopy of the riparian woodland. Within the Project impact area, riverine habitat makes up approximately 0.18 acres (~3%).

Wildlife

Wildlife species observed within the BSA during biological surveys includes common bird, mammal, and reptile species found across California. The riparian and grassland habitats within

the BSA are suitable for a variety of wildlife species, providing appropriate cover, as well as nesting and foraging habitat. Species common of the area include western bluebird (*Sialia mexicana*), gopher snake (*Pituophis catenifer*), coyote (*Canis latrans*), and California toad (*Anaxyrus boreas halophilus*) (iNaturalist 2020). White River is shallow and seasonal; therefore, it is unlikely to support regular populations of fish and other aquatic wildlife species which would require permanent sources of surface water. Table 2 lists the wildlife species observed within the BSA during April 1, April 23, and May 14, 2020 survey efforts.

Table 2. Wildlife Species Observed

Common Name	Scientific Name	Native (N) / Non-native (X)
Acorn woodpecker	*Melanerpes formicivorus*	N
American crow	*Corvus brachyrhynchos*	N
American kestral	*Falco sparverius*	N
Bewick's wren	*Thryomanes bewickii*	N
Bobcat (Red Lynx)	*Lynx rufus*	N
California ground squirrel	*Otospermophilus beecheyi*	N
California scrub jay	*Aphelocoma californica*	N
Common peafowl	*Pavo cristatus*	X
Red-tailed hawk	*Buteo jamaicensis*	N
Sparrow	Family Passerellidae	N
Turkey vulture	*Cathartes aura*	N
Western fence lizard	*Sceloporus occidentalis*	N

3.1.4 Habitat Connectivity

The BSA is within an area of Terrestrial Connectivity Rank 4 – Conservation Planning Linkages (CDFW 2020). This ranking indicates that the area represents the best connections between core natural areas, conservation of which would maintain habitat connectivity in a way that benefits the ecosystem. Habitat linkages are defined as the optimal path for terrestrial wildlife which connects two natural areas. Areas of Rank 4 Connectivity do not represent the most critical pathways for terrestrial wildlife movement, although they are amongst the higher priorities for conservation. While the BSA and surrounding lands provide opportunities for terrestrial wildlife habitat connectivity, the area does contain existing built barriers to some wildlife species, such as M109 and livestock fencing around existing properties.

3.2 Regional Species and Habitats and Natural Communities of Concern

Plant and animal species are considered to have special status if they have been listed as such by Federal or State agencies or by one or more special interest groups, such as CNPS. Prior to the field surveys, literature searches of the USFWS, CNDDB, and CNPS databases were conducted to identify regionally sensitive species with potential to occur in the Project vicinity. Table 1. Special Status Species with Potential to Occur in the Project Vicinity provides a list of regional species of special concern returned by database searches, describes the habitat requirements for each species, and states if the species was determined to have potential to occur within the BSA.

Table 3. Special Status Species with Potential to Occur in the Project Vicinity

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Amphibian Species						
California red-legged frog	*Rana draytonii*	Fed: State: CDFW:	T -- --	The species is endemic to California and northern Baja California. Inhabits lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Associated with humid forests, woodlands, grasslands, coastal scrub, and streamsides. The species requires 11-20 weeks of permanent water for larval development and must have access to estivation habitat; estivation occurs from late summer to early winter. If wetlands are dry, requires animal burrows or other moist refuges. Occurs close to permanent and quiet stream pools, marshes, and ponds. Breeds from March to July in northern regions and January to July in southern regions. Occurs from elevations near sea level to 5,200 feet.	A	**Presumed Absent:** The BSA contains foothill habitat, White River, and associated riparian woodland habitat. However, White River is not permanently wetted and lacks ponds with deep water required by the species. In addition, the BSA is located in Tulare County, which is outside of the species' known range. There are no documented CNDDB occurrences of the species within a 10-mile radius of the BSA. Due to the lack of suitable aquatic habitat and recent, nearby occurrences, the species is presumed absent. *Section 7 Determination: No Effect*
Foothill yellow-legged frog	*Rana boylii*	Fed: State: CDFW:	-- E SSC	Inhabits shallow streams and riffles with rocky substrate and open, sunny banks in a variety of habitats including chaparral and woodland forests. Tadpoles require water for at least three or four months to complete development. Breeds March to May, with eggs laid in clusters on the downstream side of rocks in shallow, slow-moving water,	A	**Presumed Absent:** The section of White River which runs through the BSA lacks rocky substrate and suitable water flow to support the species. It is seasonally wetted and fairly shallow within the BSA. The nearest historic documented CNDDB occurrence is approximately 4.1 miles east of the BSA, within White River. Collections of the species occurred at this location in 1940 and 1970, and the species is currently considered extirpated

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				attached to rocks, pebbles, and vegetation. Occurs from elevations near sea level to 6,700 feet.		from this location. Due to the lack of suitable habitat and CNDDB listing as extirpated, the species is presumed absent.
Western spadefoot	*Spea hammondii*	Fed: State: CDFW:	-- -- SSC	Inhabits open areas with sandy or gravelly soils within mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Burrows underground from most of the year and is active above ground during rainfall. Requires vernal, shallow, temporary pools formed by heavy winter rains for reproduction. These pools must be free of bullfrogs, fish, and crayfish. Breeds from late winter to March.	A	**Presumed Absent:** The BSA contains sandy soils within foothill communities, but lacks vernal pools required by the species for breeding. There is one documented CNDDB occurrence of the species within a 10-mile radius of the BSA, located approximately 5.5 miles northwest of the BSA (2001). Due to the lack of suitable habitat and distance to recent occurrences, the species is presumed absent.
Bird Species						
Burrowing owl	*Athene cunicularia*	Fed: State: CDFW:	-- -- SSC	The species inhabits arid, open areas with sparse vegetation cover such as deserts, abandoned agricultural areas, grasslands, and disturbed open habitats. Can be associated with open shrub stages of pinyon-juniper and ponderosa pine habitats. Nests in old small mammal burrows but may dig own burrow in soft soil. Nests are lined with excrement, pellets, debris, grass, and feathers. The species may use pipes, culverts, and nest boxes, and even buildings where burrows are scarce. Breeding occurs March	A	**Presumed Absent:** The BSA contains annual grasslands but lacks open areas with suitable locations for burrows. In addition, no suitable burrows or evidence of the species were identified during biological survey efforts. There is one documented CNDDB occurrence of the species located approximately 9.2 miles northwest of the BSA (2007). Due to the distance of recent occurrences and the lack of suitable burrow habitat, the species is presumed absent.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				through August (below 5,300 feet).		
California condor	*Gymnogyps californianus*	Fed: State: CDFW:	E -- --	The species inhabits semi-arid, rugged mountain ranges up to 6,000 feet. Nesting sites occur in caves, crevices, behind rock slabs, and on large cliff ledges. Nests are not constructed; eggs are laid on dirt floors, often surrounded by dense brush. Foraging sites occur in open grassland and oak savanna foothill habitat, sometimes far from nesting sites. Large trees and snags are required for roosting. The species is reproductive after the age of 6 years. Only one egg is laid per nesting attempt, and nesting does not occur in consecutive years. Young depend on the parents for up to 12 months.	A	**Presumed Absent:** The BSA is within a foothill area and lacks rugged mountain ranges inhabited by the species. Furthermore, the BSA lacks appropriate nesting sites, such as caves, crevices, large rock outcrops, and cliff ledges. There are no documented CNDDB occurrences of the species within a 10-mile radius of the BSA. Due to the lack of suitable nesting habitat and recent, nearby occurrences, the species is presumed absent. *Section 7 Determination: No Effect*
Tricolored blackbird	*Agelaius tricolor*	Fed: State: CDFW:	-- T SSC	Inhabits freshwater marsh, swamp, and wetland communities, but may utilize agricultural or upland habitats that can support large colonies, often in the Central Valley area. Requires dense nesting habitat that is protected from predators, is within 3-5 miles from a suitable foraging area containing insect prey and is within 0.3 miles of open water. Suitable foraging includes wetland, pastureland, rangeland, at dairy farms, and some irrigated croplands (silage, alfalfa, etc.). Nests in dense	A	**Presumed Absent:** The BSA contains White River and a riparian corridor; however, this wetted area lacks suitable nesting vegetation for the species. In addition, there are no documented CNDDB occurrences of the species within a 10-mile radius of the BSA. Due to the lack of suitable nesting habitat which could support a colony of the species, and the lack of recent, nearby occurrences, the species is presumed absent.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				cattails, tulles, willow, blackberry, wild rose, or tall herbs. Nests mid-March to early August but may extend until October or November in the Sacramento Valley region.		
Fish Species						
Delta smelt	*Hypomesus transpacificus*	Fed: State: CDFW:	T -- --	This species is endemic to California and can tolerate a wide range of salinity and temperatures but is most commonly found in brackish waters. Juveniles require shallow waters with food rich sources. Adults require adequate flow and suitable water quality for spawning in winter and spring. Occurs within the Sacramento-San Joaquin Delta and seasonally within the Suisun Bay, Carquinez Strait, and San Pablo Bay. Most often occurs in partially saline waters.	A	**Presumed Absent:** White River, the water resource which runs through the BSA, is only seasonally wetted; therefore, it is unlikely to support the species. In addition, the BSA is outside of the Sacramento-San Joaquin Delta, the Suisun Bay, Carquinex Strait, and San Pablo Bay, where the species is known to occur. There are no documented CNDDB occurrences of the species within a 10-mile radius of the BSA. Due to the condition of White River, the location of the BSA, and the lack of recent, nearby occurrences, the species is presumed absent. *Section 7 Determination: No Effect*
Invertebrate Species						
Crotch bumble bee	*Bombus crotchii*	Fed: State: CDFW:	-- CE --	This species is known to occur in central California, Nevada south to Baja California and into Mexico. Inhabits coastal areas, deserts, and the Central Valley. The species nests underground in grassland, shrubland and chaparral habitats. The species has a short tongue and primarily feeds on the following plant genera: *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia* and *Salvia.*	HP	**Low to Moderate Potential:** The BSA contains annual grassland communities in which the species may inhabit. In addition, flowering plants which the species may feed upon were identified within the BSA during protocol rare plant surveys conducted in the spring of 2020. Collections of the species were made at this site in 1949 and 1951. Due to the presence of potentially suitable habitat and flora within the BSA, the species is considered to have a low to moderate potential to occur.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Mammal Species						
American badger	*Taxidea taxus*	Fed: State: CDFW:	-- -- SSC	Prefers treeless, dry, open stages of most shrub and herbaceous habitats with friable soils and a supply of rodent prey. Species also inhabits forest glades, meadows, marshes, brushy areas, hot deserts, and mountain meadows. Species maintains burrows within home ranges estimated between 338 and 1,700 acres, dependent on seasonal activity. Burrows are frequently re-used, but new burrows may be created nightly. Young are born in March and April within burrows dug in relatively dry, often sandy, soil, usually in areas with sparse overstory cover. Species is somewhat tolerant of human activity, but is sensitive to automobile mortality, trapping, and persistent poisons (up to 12,000 feet).	HP	**Presumed Absent:** The BSA contains minimal open annual grassland habitat and no dens or potential burrow sites were observed within the Project impact area during biological survey efforts. In addition, there is one historic CNDDB occurrence of the species within a 10-mile radius of the BSA, which is documented within a one-mile area that encompasses the BSA (1895). Due to the lack of potentially suitable habitat and lack of recent occurrences the species is presumed absent.
California wolverine	*Gulo gulo*	Fed: State: CDFW:	-- T FP	The species is a scarce resident of North Coast mountains and Sierra Nevada. In north coastal areas, the species has been observed in Douglas-fir and mixed conifer habitats, and probably uses red fir, lodgepole, wet meadow, and montane riparian habitats at elevations from 1,600-4,800 feet. In the northern Sierra Nevada, the species has been found in mixed conifer, red fir, and lodgepole	A	**Presumed Absent:** The BSA is in the southern Sierra Nevada part of the species' range. It lacks red fir, mixed conifer, lodgepole, subalpine conifer, alpine dwarf-shrub, barren meadow, wet meadow, montane chaparral, and Jeffrey pine communities. In addition, the BSA is outside of the species' known elevation range in the southern Sierra Nevada. There are no documented CNDDB occurrences of the species within a 10-mile radius of the BSA. Due to the elevation of the BSA, the lack of recent,

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				habitats, and probably use subalpine conifer, alpine dwarf-shrub, wet meadow, and montane riparian habitats at elevations from 4,300-7,300 feet. In the southern Sierra Nevada, the species inhabits red fir, mixed conifer, lodgepole, subalpine conifer, alpine dwarf-shrub, barren meadows, wet meadows, montane chaparral, and Jeffrey pine communities at elevations from 6,400-10,800 feet. The species prefers areas with low human disturbance and uses caves, hollows in cliffs, logs, rock outcrops, and burrows for cover, generally in denser forest stages. Home ranges can vary from 100-600 square miles but averages 156 square miles for males and 144 square miles for females. Mating occurs from May to July, with offspring being born from January through April.		nearby occurrences, and the lack of suitable habitat, the species is presumed absent.
Fisher – Southern Sierra Nevada ESU	*Pekania pennanti pop. 2*	Fed: State: CDFW:	E T SSC	Inhabits mature, dense habitats of north coast coniferous forest and old growth and riparian forest communities with a high percent of canopy closure, large trees and snags with cavities and other deformities, large diameter downed wood and multiple canopy layers. Forest structural composition is critical for species; diversity in tree size and shape, light gaps and associated understory vegetation, natural	A	**Presumed Absent:** The BSA lacks dense coniferous forest habitat and is outside of the elevation range of the species' Southern Sierra Nevada ESU. The scattered oaks within the BSA do not provide suitable forest composition and complexity for the species, and thus is unlikely to support the species. There is one historic documented CNDDB occurrence of the species within a 10-mile radius of the BSA, located approximately 8.5 miles northeast of the BSA (1980s). Due to the lack of suitable habitat, the

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				structures (downed trees, broken limbs, snags, etc.) and limbs close to the ground. Breeds from late February to late April. In the Southern Sierra Nevada, the species is not found at elevations below 4,500 feet.		elevation of the BSA, and the location and date of nearby occurrences, the species is presumed absent. *Section 7 Determination: No Effect*
San Joaquin kit fox	*Vulpes macrotis mutica*	Fed: State: CDFW:	E T --	Inhabits open, level (less than 5 percent slopes) alkali scrub/shrub and arid grassland communities with scattered shrubby vegetation and short vegetative structure. Preferred substrates are loose, relatively stone-free, sandy soils and are unlikely to utilize locations with high water tables, subject to flooding, impenetrable hardpans, close proximity to parent material (such as bedrock) or soils that are intensively irrigated. Species feeds preferentially on kangaroo rats but will consume other food sources; habitat must have an appropriate prey base capable of sustaining a kit fox population. Utilizes subsurface dens for shelter and reproduction; young disperse in August or September.	A	**Presumed Absent:** The BSA lacks alkali scrub communities but does contain grassland habitat with scattered oak trees and shrubs. However, a lack of suitable habitat, den sites, or burrows was documented during the 2020 habitat assessment conducted for the species. The nearest documented CNDDB occurrence of the species is approximately 3.5 miles west of the BSA and is over 45 years old (1975). Additionally, the presence of predatory and competitive bobcat (*Lynx rufus*) reduces the potential for the species presence within the project area. Due to the lack of suitable habitat, lack of recent occurrences, and predatory species within the BSA, the species is presumed absent. *Section 7 Determination: No Effect*
Townsend's big-eared bat	*Corynorhinus townsendii*	Fed: State: CDFW:	-- -- SSC	Species occurs throughout California in all habitats except subalpine and alpine communities. Requires caves, mines, tunnels, buildings or man-made structures for day and night roosts. Rarely roots in tree cavities, limited to males and non-reproductive females. Young	A	**Presumed Absent:** The BSA lacks caves, tunnels, and structures suitable for roosting. There is one historic CNDDB occurrence of the species within a 10-mile radius of the BSA, which is documented within a one-mile area that encompasses the BSA (1895). Due to the lack of suitable roosting habitat and the lack of

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				born May-June (0-10,000 feet elevation).		recent nearby occurrences, the species is presumed absent.
Reptile Species						
Blunt-nosed leopard lizard	*Gambelia silus*	Fed: State: CDFW:	E -- --	The species inhabits sparsely vegetated alkali and desert scrub habitats in areas of low topographic relief, including alkali flats, arroyos, canyons, and washes with dense vegetation in the San Joaquin Valley and foothills. Uses mammal burrows, shrubs, and structures (fence posts) for shelter. Large shrubs with dense canopy cover are used for thermoregulation. The species prefers flat areas where these features are dispersed sparsely throughout. The number of available burrows determines the size of the local population. The species breeds and lays eggs from May through August (100-2,400 feet).	A	**Presumed Absent:** The BSA lacks alkali and desert scrub habitat, and is within foothill habitat that lacks arroyos, canyons, and washes. In addition, there are no documented CNDDB occurrences of the species within a 10-mile radius of the BSA. Due to the lack of suitable habitat and recent nearby occurrences, the species is presumed absent. *Section 7 Determination: No Effect*
California legless lizard	*Anniella spp.*	Fed: State: CDFW:	-- -- SSC	The genus is known to live underground, in loose, sandy soils. Moisture is essential. Forages in loose soil, sand, and leaf litter during the day. Habitat types include dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces. Mostly active in the morning and evening. The genus ranges across California, with five species present. In Tulare County, *A. pulchra* and *A. campi* are known to occur. There are also areas within the County	A	**Presumed Absent:** The BSA lacks dunes, chaparral, scrub, and woodland habitat. Additionally, there are no recent CNDDB occurrences of the species within 10-miles of the BSA. Due to the lack of suitable habitat, and lack of known occurrences, the species is presumed absent.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				where *Anniella* occurs, but the species has not been determined. Bears live young, breeding in early spring through July, birthing in the fall.		
Sierra night lizard	*Xantusia vigilis sierrae*	Fed: State: CDFW:	-- -- SSC	A secretive lizard inhabiting rocky outcrops in open grassland with scattered oak woodland and low shrubs. Found only in the southwestern foothills of the Sierra Nevada Mountains along the western edge of the Greenhorn mountains in Kern County. The species spends most of its life undercover, in rock crevices and outcrops. Requires exfoliated and fissured granite outcrops, a very specialized habitat type which takes thousands of years to form via geologic processes.	A	**Presumed Absent:** The BSA does contain potentially suitable grassland communities with scattered oak trees. However, the BSA is outside of the species is known range, which is south of the BSA at the western edge of the Greenhorn mountains in Kern County. There is one recent documented CNDDB occurrence located approximately 9.6 miles south of the BSA (2003) within Kern County. Due to the BSA being outside of the species known range, and the location of the recent occurrences of the species, the species is presumed absent.
Western pond turtle	*Emys marmorata*	Fed: State: CDFW:	-- -- SSC	A fully aquatic turtle of ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with aquatic vegetation. Suitable habitat includes woodland, forests, and grasslands. Requires logs, rocks, cattail mats, and exposed banks for basking. Suitable upland habitat (sandy banks or grassy open field) is required for reproduction, which begins in April and ends with egg laying as late as August (sea level to 4,700 feet).	A	**Presumed Absent:** White River, the main water source within the BSA, is not permanently wetted and lacks structural elements such as rocks and logs which the species utilizes for basking. There is one documented CNDDB occurrence of the species located approximately 8.6 miles southeast of the BSA (date unknown). Due to the lack of suitable aquatic habitat and the lack of recent occurrences, the species is presumed absent.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Plant Species						
Aromatic canyon gooseberry	*Ribes menziesii var. ixoderme*	Fed: State: CNPS:	-- -- 1B.2	A perennial deciduous shrub inhabiting chaparral and cismontane woodland communities. Flowers in April (2,000-3,800 feet).	A	**Presumed Absent:** The BSA lacks chaparral and woodland habitat, and is located outside of the species' known elevation range. Additionally, there are no recent CNDDB occurrences within 10 miles of the BSA. Due to lack of suitable habitat, and the BSA being outside of the species known range, the species is presumed absent.
Bakersfield cactus	*Opuntia basilaris var. treleasei*	Fed: State: CNPS:	E E 1B.1	A perennial stem succulent inhabiting sandy or gravelly soils of chenopod scrub, cismontane woodland, and valley and foothill grassland communities. Flowers in April (400-3,700 feet).	HP	**Presumed Absent:** The BSA contains areas of sandy, gravelly soils and annual grassland communities; however, these areas are disturbed by grazing activity. There is one recent documented CNDDB occurrence of the species approximately 8.5 miles south of the BSA (2014). The species was not observed during protocol botanical surveys conducted in the spring of 2020. Due to the condition of the habitat within the BSA, the location of recent occurrences, and the results of the 2020 protocol rare plant surveys, the species is presumed absent. *Section 7 Determination: No Effect*
Berry's morning-glory	*Calystegia malacophylla var. berryi*	Fed: State: CNPS:	-- -- 3.3	A perennial rhizomatous herb inhabiting chaparral and lower montane coniferous forest communities. Flowers July-August (2,000-8,000 feet).	A	**Presumed Absent:** The BSA lacks chaparral and coniferous forest habitats and is located outside of the species' known elevation range. There are no documented CNDDB occurrences of the species within a 10-mile radius of the BSA. Due to the elevation of the BSA, the lack of suitable habitat, and the lack of recent, nearby occurrences, the species is presumed absent.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Calico monkeyflower	*Diplacus pictus*	Fed: State: CNPS:	-- -- 1B.2	An annual herb inhabiting bare, sunny, shrubby areas in proximity to granite outcrops and granitic disturbed areas of broad-leafed upland forest and cismontane woodland communities. Flowers March-May (330-4,700 feet).	A	**Presumed Absent:** The BSA lacks shrubby areas, broad-leafed upland forest, and cismontane woodland. The most recent documented CNDDB occurrence of the species is approximately 4.6 miles south of the BSA (2017). However, due to the lack of suitable habitat, the species is presumed absent despite nearby occurrences.
Delicate bluecup	*Githopsis tenella*	Fed: State: CNPS:	-- -- 1B.3	An annual herb inhabiting moist areas in oak woodland. Blooms May-June (3,600-6,300 feet).	A	**Presumed Absent:** The BSA lacks oak woodland and is located outside of the species' known elevation range. There are no documented CNDDB occurrences of the species within a 10-mile radius of the BSA. Calflora reports historic occurrences of the species in southern Tulare County and northern Kern County, all located over 10 miles away from the BSA. Due to the lack of suitable habitat and recent, nearby occurrences, the species is presumed absent.
Greenhorn fritillary	*Fritillaria brandegeei*	Fed: State: CNPS:	-- -- 1B.3	A perennial bulbiferous herb inhabiting granitic soils of lower montane coniferous forest communities. Flowers April-June (4,300-6,900 feet).	A	**Presumed Absent:** The BSA lacks montane coniferous forest and is located outside of the species' known elevation range. There are no documented CNDDB occurrences of the species within a 10-mile radius of the BSA; however, Calflora reports a historic occurrence of the species approximately 9 miles east of the BSA (1934). Due to the lack of suitable habitat and recent, nearby occurrences, the species is presumed absent.
Grey-leaved violet	*Viola pinetorum ssp. grisea*	Fed: State: CNPS:	-- -- 1B.2	A perennial herb inhabiting lodgepole forest, subalpine forest, and red fir forest. Blooms April-July (6,500-12,000 feet).	A	**Presumed Absent:** The BSA lacks lodgepole forest, subalpine forest, and red fir forest habitats, and is located outside of the species' known elevation range. There are no documented CNDDB occurrences of the species within a 10-

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						mile radius of the BSA. In addition, Calflora reported occurrences of the species are all located over 10 miles away from the BSA, in higher elevation locations. Due to the lack of suitable habitat and recent, nearby occurrences, the species is presumed absent.
Keck's checkerbloom	*Sidalcea keckii*	Fed: State: CNPS:	E -- 1B.1	An annual herb inhabiting serpentinite and clay soils on grassy slopes within cismontane woodland, valley and foothill grassland communities. Flowers April-May (250-2,100 feet).	HP	**Presumed Absent:** The BSA contains annual grasslands with scattered oak trees. In addition, there is one documented CNDDB occurrence of the species within a 10-mile radius of the BSA, located approximately 0.22 miles southeast of the BSA on M109. The species was collected at this location in 1935, 1938, and 1939. In 1985 it was reported that the species had not inhabited this site for several years; however, in 2002, reports indicated that suitable habitat was still present. Due to this occurrence, protocol rare plant surveys were conducted within the BSA on April 1, April 23, and May 14 of 2020. No evidence of the species was found within the BSA during these surveys (**Appendix D. Botanical Survey Report**). Despite suitable habitat and nearby occurrences, the species is presumed absent due to the results of the 2020 protocol botanical surveys. *Section 7 Determination: No Effect*
Madera leptosiphon	*Leptosiphon serrulatus*	Fed: State: CNPS:	-- -- 1B.2	An annual herb inhabiting openings in woodland and chaparral of cismontane woodland and lower montane coniferous forest communities.	A	**Presumed Absent:** The BSA lacks chaparral, cismontane woodland, and coniferous forest habitats. There is one historic documented CNDDB occurrence of the species within a 10-mile radius of

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				Flowers April-May (990-4,300 feet).		the BSA, located approximately 7.5 miles southeast of the BSA (1935). Due to the lack of suitable habitat and the date and location of nearby occurrences, the species is presumed absent.
Onyx Peak bedstraw	*Galium angustifolium ssp. onycense*	Fed: State: CNPS:	-- -- 1B.3	A perennial herb inhabiting granite outcrops in foothill woodland and open oak-pine woodland. Flowers April-July (3,100-7,500 feet).	A	**Presumed Absent:** The BSA lacks oak-pine woodland habitat and is located outside of the species' known elevation range. There is one documented CNDDB occurrence of the species within a 10-mile radius of the BSA, located approximately 5.5 miles east of the BSA (date unknown, published in 1995 *Key to Vascular Plant Species of Kern County*). Due to the elevation of the BSA, the lack of suitable habitat, and the location of nearby occurrences, the species is presumed absent.
Piute Mountains navarretia	*Navarretia setiloba*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting clay or gravelly loam soils of cismontane woodland, pinyon/juniper woodland, and valley and foothill grassland communities. Flowers April-July (940-6,900 feet).	HP	**Presumed Absent:** The BSA lacks clay soils, but does contain areas of gravelly loam. In addition, the BSA lacks woodland habitats, but does contain annual grassland communities. The annual grassland within the BSA is disturbed by grazing activity. There is one historic documented CNDDB occurrence of the species within a 10-mile radius of the BSA, located approximately 7.6 miles east of the BSA (1985). In addition, the species was not observed during the 2020 protocol botanical surveys. Due to the condition of the habitat within the BSA, the location and date of nearby occurrences, and the results of the 2020 protocol botanical surveys, the species is presumed absent.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
San Joaquin adobe sunburst	*Pseudobahia peirsonii*	Fed: State: CNPS:	T E 1B.1	An annual herb inhabiting bare, adobe clay soils of cismontane woodland and valley and foothill grassland communities. Flowers March-April (300-3,000 feet).	HP	**Presumed Absent:** The BSA contains grassland communities, but lacks bare, undisturbed areas, clay soils, and woodland habitat. The most recent documented CNDDB occurrence of the species is approximately 4.3 miles northwest of the BSA, where a population of approximately 100 plants was observed (2010). The nearest historic documented CNDDB occurrence of the species is approximately 0.29 miles southeast of the BSA (1992). Due to these occurrences, protocol rare plant surveys were conducted within the BSA on April 1, April 23, and May 14 of 2020. No evidence of the species was found within the BSA during these surveys (**Appendix D**). Despite potentially suitable habitat and nearby occurrences, the species is presumed absent due to the results of the 2020 protocol botanical surveys. *Section 7 Determination: No Effect*
San Joaquin woollythreads	*Monolopia congdonii*	Fed: State: CNPS:	E -- 1B.2	An annual herb inhabiting sandy valley and foothill grassland, alkali sinks of chenopod scrub communities. Flowers February-May (200-2,600 feet).	HP	**Presumed Absent:** The BSA contains sandy grassland communities, but lacks alkali sinks and chenopod scrub communities. There is one historic documented CNDDB occurrence of the species within a 10-mile radius of the BSA, located approximately 7.5 miles northeast of the BSA, along Deer Creek (1881). In addition, the species was not observed during the 2020 protocol botanical surveys. Due to the lack of recent, nearby occurrences, the species

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						is presumed absent, despite the presence of potentially suitable habitat. *Section 7 Determination: No Effect*
Spiny-sepaled button-celery	*Eryngium spinosepalum*	Fed: State: CNPS:	-- -- 1B.2	An annual/perennial herb inhabiting roadside ditches, depressions, vernal pools, swales, and valley and foothill grassland communities. Flowers April-June (260-3,200 feet).	HP	**Presumed Absent:** The BSA contains annual grassland habitat, but lacks vernal pools. The nearest, most recent documented CNDDB occurrence of the species is approximately 5.0 miles south of the BSA (2007). In addition, the species was not observed during the 2020 protocol botanical surveys. Due to the lack of recent, nearby occurrences, the species is presumed absent, despite the presence of potentially suitable habitat.
Springville clarkia	*Clarkia springvillensis*	Fed: State: CNPS:	T E 1B.2	An annual herb inhabiting granitic soils of chaparral, cismontane woodland, and valley and foothill grassland communities. Flowers in May (800-4,000 feet).	HP	**Presumed Absent:** The BSA contains granitic soils and grassland communities; however, the area of the BSA which contains granitic soils is highly disturbed by grazing activity and the BSA lacks chaparral and woodland habitat. There is one recent documented CNDDB occurrence of the species within a 10-mile radius of the BSA, located approximately 7.5 miles northeast of the BSA (2010). The species was not observed during the 2020 protocol botanical surveys. Due to the disturbance of granitic soils within the BSA and the location of recent occurrences, the species is presumed absent, despite the presence of potentially suitable habitat. *Section 7 Determination: No Effect*
Striped adobe-lily	*Fritillaria striata*	Fed: State: CNPS:	-- T 1B.1	A perennial bulbiferous herb inhabiting Adobe, typically clay, soils of cismontane woodland and	A	**Presumed Absent:** The BSA contains annual grassland communities, but lacks clay soils and woodland habitat. There

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				valley and foothill grassland communities. Flowers February-April (440-4,775 feet).		are no documented CNDDB occurrences of the species within a 10-mile radius of the BSA. Calflora reports historic occurrences of the species to the north in the Porterville area and to the south in north-central Kern County, all located over 10 miles away from the BSA. In addition, the species was not observed during the 2020 protocol botanical surveys. Due to the lack of suitable habitat and recent, nearby occurrences, the species is presumed absent.

Federal Designations (Fed):	**State Designations (State):**
(FESA, USFWS) **E:** Federally listed, endangered **T:** Federally listed, threatened **D:** Delisted	(CESA, CDFW) **E:** State-listed, endangered **T:** State-listed, threatened **D:** Delisted

Other Designations:

CDFW_SSC: CDFW Species of Special Concern

CDFW_FP: CDFW Fully Protected

California Native Plant Society (CNPS) Designations*:*

Note: according to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code. This interpretation is inconsistent with other definitions.

1A: Plants presumed extinct in California.

1B: Plants rare and endangered in California and throughout their range.

2: Plants rare, threatened, or endangered in California but more common elsewhere in their range.

3: Plants about which need more information; a review list.

Plants 1B, 2, and 4 extension meanings:

_**.1** Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

_**.2** Fairly endangered in California (20-80% occurrences threatened)

_**.3** Not very endangered in California (<20% of occurrences threatened, or no current threats known)

Habitat Potential

Absent [A]	- No habitat present and no further work needed.
Habitat Present [HP]	- Habitat is or may be present. The species may be present.
Critical Habitat [CH]	- Critical Habitat is present.

Potential for Occurrence Criteria:

High: Habitat (including soils and elevation factors) for the species occurs on site and a known occurrence has been recorded within 5 miles of the site.

Low-Moderate: Either low quality habitat (including soils and elevation factors) for the species occurs on site and a known occurrence exists within 5 miles of the site; or suitable habitat strongly associated with the species occurs on site, but no records were found within the database search.

Presumed Absent: Focused surveys were conducted and the species was not found, or species was found within the database search but habitat (including soils and elevation factors) do not exist on site, or the known geographic range of the species does not include the survey area.

Sources: Calflora 2020, Cal-Herps 2020, CNDDB 2020, CNPS 2020, Jepson 2020b, Zeiner 1990.

4. Results: Biological Resources, Discussion of Impacts, and Mitigation

4.1 Habitats and Natural Communities of Special Concern

Habitats and natural communities are considered to be of special concern based on Federal, State, or local laws regulating their development; limited distributions; and/or the habitat requirements of special status plants or animals occurring onsite. The natural communities of special concern identified within the BSA are White River, seasonal wetland, and riparian woodland. White River and seasonal wetlands are jurisdictional waters of the U.S. and State under the jurisdiction of the USACE and the Central Valley RWQCB, and riparian woodland is a jurisdictional habitat under CDFW. Table 4. Impacts to Sensitive Natural Habitats and Figure 5. Project Impacts to Sensitive Natural Habitats, outline the approximately anticipated impacts to these communities as a result of the proposed Project.

Table 4. Impacts to Sensitive Natural Habitats

Natural Habitat	Net Impacts (acres)	
	Temporary	Permanent
Riparian Woodland	0.226	0.106
Seasonal Wetland	0.014	<0.001
Riverine (White River)	0.048	0.046
Total	0.288	0.1522

4.1.1 Discussion of White River

White River runs for approximately 47 miles from the foothills of southern Tulare County, on the southwest slopes of the Sierra Nevada into the Central Valley. It is within the Upper Deer-Upper White watershed of the Tulare-Buena Vista Lakes Basin. The river is seasonally flooded, with a number of intermittent tributaries that reach further into the foothills during the wet season.

4.1.1.1 *Survey Results for White River*

During biological surveys, the OHWM of White River was mapped within the BSA. Within the Project impact area, White River encompasses approximately 0.18 acres of land in the form of riverine habitat. The river runs from east to west under the M109 White River Bridge. Approximately 90 feet west of the bridge, the river forks, with a heavier volume of flow heading north along M109 for approximately 75 feet. At this point, the river pools and forks again. One section of the river travels north along M109 for approximately 115 feet, then sharply turns west, fitting with the topography of the area. At both forks in White River within the Project area, a small volume of flow travels west until topography and debris redirect the water north. Approximately 320 feet northwest of the bridge, these small segments of White River all reconverge, and the river continues in a northwestern direction. The complicated hydrology of this small section of White River is a result of the hilly topography of the area, along with natural drainage patterns of the foothills.

Project Impact Area (~6.81 acres)

Design Features

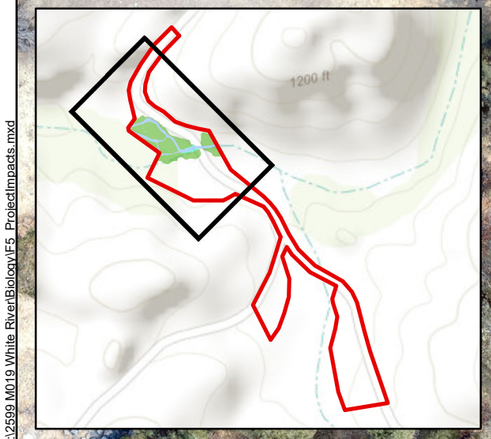
- Existing M109 White River Bridge
- Pavement Edges
- Proposed M109 White River Bridge
- Cut and Fill Lines

Sensitive Natural Communities

- Riparian Woodland (~0.73 acres)
- Seasonal Wetland (~0.02 acres)
- Riverine (~0.18 acres)

Impacts to Sensitive Natural Communities

- Riparian Permanent Impact (~0.106 acres)
- Riverine Permanent Impact (~0.074 acres)
- Wetland Permanent Impact (~0.0002 acres)
- Riverine Gain (~0.028 acres)
- Riparian Temporary Impact (~0.226 acres)
- Riverine Temporary Impact (~0.048 acres)
- Wetland Temporary Impact (~0.014 acres)



V:\2599.M019.White River\Biology\F5_ProjectImpacts.mxd

Source: ESRI Maps Online; Dokken Engineering 12/4/2020; Created By: cfavro

1 inch = 50 feet

0 50 100 150 200 Feet

Figure 5. Project Impacts to Sensitive Natural Habitats

BRLS-5946(170)
M109 over White River Bridge Replacement Project
White River, Tulare County, California

4.1.1.2 *Project Impacts to White River*

The proposed Project would require reconstruction of approach roadways on either side of the new bridge in an alignment adjacent to the existing bridge. Both the new bridge and approach roadways would result in permanent impacts to approximately 0.074 acres of White River. The construction of the approach roadway at a higher elevation than the existing roadway would require that fill slopes extend into the segment of White River which runs parallel along M109 northwest of the bridge. Additional riverine channel outside of the cut and fill will be impacted as well, as water would no longer be able to flow through a segment of the river totaling in approximately 0.074 acres of permanent impacts. In order to ensure hydrologic function of White River, the channel will be redirected and widened in areas to allow for water to flow through the site and bypass the area of proposed fill. This would result in a gain of approximately 0.028 acres of riverine channel, for a net permanent loss of 0.046 acres of riverine channel. In addition, approximately 0.048 acres of White River channel would be temporarily impacted during Project construction-related activities, due to construction access during demolition of the existing bridge and construction of the proposed bridge footing.

4.1.1.3 *Avoidance and Minimization Efforts/Compensatory Mitigation for White River*

The Project is anticipated to permanently impact 0.046 acres of White River and temporarily impact 0.048 acres of White River. With the incorporation of the following Best Management Practices (BMPs) as avoidance and minimization measures, impacts to White River would be reduced to the extent feasible.

BIO-1: Contract specifications will include the following BMPs, where applicable, to reduce erosion during construction:

- Implementation of the project will require approval of a site-specific Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Plan (WPCP [if ground disturbance is less than 1 acre]) that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;

- Existing vegetation would be protected where feasible to provide an effective form of erosion and sediment control;

- Exposed soils would be covered by loose bulk materials or other materials to reduce erosion and runoff during rainfall events.

- Exposed soils would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction-related activities such as traffic and grading activities.

- All concrete curing activities would be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly.

- All construction-related materials, vehicles, stockpiles, and staging areas would be situated outside of the stream channel as feasible. All stockpiles would be covered, as feasible.

- All erosion control measures and storm water control measures would be properly maintained until final grading has been completed and permanent erosion control measures are implemented.

- All disturbed areas would be restored to pre-construction contours and revegetated, where applicable, either through hydroseeding or other means, with native or approved non-invasive exotic species.

- All construction-related materials (such as equipment, waste, or excess materials) would be hauled off-site after completion of construction and disposed of or stored at proper disposal and/or storage facilities.

BIO-2: Prior to the start of construction-related activities, the Project limits in proximity to White River, seasonal wetlands, and riparian woodland must be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into waters or sensitive habitats. In particular, seasonal wetlands will be protected to the extent feasible. The Project biologist will monitor the installation of ESA fencing and will periodically inspect the ESA to ensure sensitive locations remain undisturbed.

BIO-3: Refueling or maintenance of equipment without secondary containment shall not be permitted to occur on the within 100 feet of the White River channel. All refueling and maintenance that must occur within 100 feet of the river must occur over plastic sheeting or other secondary containment measures to capture accidental spills before they can contaminate the soil. Secondary containment must have a raised edge (e.g. sheeting wrapped around wattles).

BIO-4: Equipment will be checked daily for leaks and will be well maintained to prevent lubricants and any other deleterious materials from entering the White River and the associated sensitive habitats.

BIO-5: Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.

BIO-6: A chemical spill kit must be kept onsite and available for use in the event of a spill.

In addition to avoidance and minimization measures **BIO-1** through **BIO-6**, the Project would implement the following mitigation measures in order to mitigate for permanent and temporary effects to the White River and associated sensitive habitats:

BIO-7: Following the completion of construction, all temporary effects to riverine, wetland, and riparian habitats would be recontoured and revegetated at a 1:1 ratio, to allow for the habitat to return to its previous function. Where possible, vegetation shall be trimmed rather than fully removed with the guidance of the Project biologist. All disturbed areas will be hydroseeded with a Project biologist approved native seed mix specific to each habitat type.

BIO-8: Permanent effects to the White River channel, associated wetlands, and riparian habitats will be provided compensatory mitigation to result in no net loss of aquatic

resources or habitat, at an agency-approved mitigation ratio via one of the follow compensatory mitigation options:

- payment of an in-lieu fee to an agency-approved mitigation site,
- compensatory off-site mitigation at an agency-approved mitigation site,
- compensatory on-site mitigation, or
- a combination of the above compensatory mitigation options.

BIO-9: The County proposes to mitigate for native trees greater than or equal to 4-inches diameter at standard height (DSH) that have been removed by the Project at a minimum 2:1 ratio (per tree) on-site, off-site, or a combination of methods.

4.1.2 Discussion of Seasonal Wetland

Seasonal wetlands typically occur within low lying floodplains along rivers and streams, where precipitation may seasonally saturate the soils. These wetlands are only saturated during select parts of the year, when the appropriate water supply is available. Seasonal wetlands are indicated by the presence of hydric soils, obligate and facultative wetland plant species, and other physical indicators of the presence of standing water or saturated soils.

4.1.2.1 *Survey Results for Seasonal Wetland*

A PJD was conducted during biological survey efforts which identified seasonal wetland within the Project impact area. Approximately 0.02 acres of seasonal wetland occurs along either bank of White River just west of the existing M109 bridge. Seasonal wetland vegetation found within this area includes obligate wetland species such as spike rushes and water smartweed.

4.1.2.2 *Project Impacts to Seasonal Wetland*

Temporary and permanent impacts to seasonal wetland are anticipated to occur due to construction of the new bridge, which would occur directly above the small area of existing seasonal wetland within the Project impact area. Approximately <0.001 acres of seasonal wetland would be permanently impacted due to the placement of new bridge footing, and these permanent effects are considered negligible. Approximately 0.014 acres of seasonal wetland would be temporarily impacted during construction due to access and proximity to active construction areas.

4.1.2.3 *Avoidance and Minimization Efforts/Compensatory Mitigation for Seasonal Wetland*

With the implementation of avoidance and minimization measures **BIO-1** through **BIO-6**, impacts to seasonal wetland would be reduced to the extent feasible. In particular, **BIO-2** would reduce the amount of permanent impacts to wetlands and allow for the habitat to return to pre-construction conditions after work is completed without extensive rehabilitation efforts. In addition, mitigation measures **BIO-7** through **BIO-9** would be incorporated into the Project to mitigate for impacts to seasonal wetland habitat.

4.1.3 Discussion of Riparian Woodland

Riparian woodland habitat is found in valleys and lower foothills, associated with floodplains and gentle topography. This community occurs in corridors along wetted areas, usually with abrupt transitions to adjacent habitat types. Mature riparian woodland canopies are dominated by trees

such as cottonwoods, sycamores, and oaks. There is typically a subcanopy of species such as white alder and Oregon ash. The usual understory is dominated by shrubs such as willows, wild grape, wild rose, and elderberry. An herbaceous layer may be found in openings in the dense understory, and plants such as sedges, rushes, miner's lettuce, and poison-hemlock can be found here (Grenfell 1988). Riparian habitats are known to have high ecological importance, providing food, water, cover, and movement corridors for a number of wildlife species.

4.1.3.1 *Survey Results for Riparian Woodland*

During biological survey efforts, the boundaries of the riparian woodland habitat within the Project impact area were mapped. In addition, plant species within riparian woodland habitat were observed. These species include willows, California buckeye, elderberry, and miner's lettuce (*Claytonia parviflora*). The trees and shrubs within the riparian woodland corridor provide ample habitat for wildlife, such as nesting habitat for birds, leaf litter cover for amphibians and reptiles, and protected foraging habitat for mammals. Riparian woodland makes up approximately 0.73 acres of the Project impact area.

4.1.3.2 *Project Impacts to Riparian Woodland*

Approximately 0.119 acres of riparian woodland would be permanently impacted by approach roadway cut and fill, the redirection of White River, placement of rock slope protection, and new bridge abutments. Approximately 0.213 acres of riparian woodland would be temporarily impacted due to construction access associated with redirection of White River, construction of the new bridge, and demolition of the old bridge.

4.1.3.3 *Avoidance and Minimization Efforts/Compensatory Mitigation for Riparian Woodland*

With the implementation of avoidance and minimization measures **BIO-1** through **BIO-6**, impacts to riparian woodland would be reduced to the extent feasible. In addition, mitigation measures **BIO-7** through **BIO-9** would be incorporated into the Project to mitigate for impacts to riparian woodland habitat.

4.2 Special Status Plant Species

Plants are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special status plants occurring on site. After protocol special status plant surveys, habitat assessment, and literature review, all special status plant species are presumed absent from the BSA.

4.3 Special Status Animal Species

Animals are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status animals occurring on site. After general biological surveys, habitat assessment, and literature review, one special status animal species was determined to have a low to moderate potential to occur within the BSA – the Crotch bumble bee (*Bombus crotchii*).

4.3.1 Discussion of Crotch Bumble Bee

The Crotch bumble bee is a candidate for listing as "endangered" under the CESA. The species was historically found throughout much of California, but is now likely extirpated from much of this original range (that is, the species is no longer present) due to the expansion of agriculture and urban areas. Crotch bumble bee inhabits open grassland and scrublands of the coast, deserts, valleys, and foothills of California. The species nests underground, overwintering in soft, disturbed soil or under lead litter, and emerging to forage. They are generalists and will visit many genera of flowering plants, including *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia,* and *Salvia* (Xerces 2018).

4.3.1.1 *Survey Results for Crotch Bumble Bee*

No Crotch bumble bee was observed during the April 2020 and May 2020 biological surveys. However, database searches, literature review, and habitat assessments suggest that the Crotch bumble bee has a low to moderate potential to occur within the BSA. The habitat within the BSA includes open grasslands which contain flowering plant genera such as *Lupinus* and *Phacelia*, which the species has been associated with. In addition, there are historical collections of the species nearby, indicating that the grassland habitat type is suitable for the species. Due to the cryptic nature of such a small species, absence cannot be assumed without appropriate survey efforts, especially with evidence of past occurrences and suitable habitat within and near to the BSA.

4.3.1.2 *Project Impacts to Crotch Bumble Bee*

The Project impact area contains approximately 1.45 acres of potentially suitable annual grassland habitat in which the species has potential to occur. While the Crotch bumble bee was determined to have a low to moderate potential to occur within the BSA, it is more likely to occur in the less disturbed hillsides and open areas outside of the immediate Project impact area. Permanent Project impacts would occur to areas in close proximity to the existing M109 (5-10), where the species is unlikely to be present or nest underground due to disturbance by road traffic. Direct impacts to nesting Crotch bumble bee individuals are unlikely. Additionally, temporary impacts such as dust and vibrations from construction-related equipment may disturb the bee species. With the implementation of Project avoidance and minimization measure **BIO-10**, the Project will not result in the take of Crotch bumble bee. With the avoidance of take, the Project does not anticipate that a CDFW Section 2081 Incidental Take Permit (ITP) for Crotch bumble bee will be necessary.

4.3.1.3 *Avoidance and Minimization Efforts/Compensatory Mitigation for Crotch Bumble Bee*

The following measures would be implemented for the Project to minimize and avoid any potential take of the Crotch bumble bee.

BIO-10: Prior to construction-related activities, a reconnaissance level survey will be conducted by the Project biologist to detect the Crotch bumble bee if it is present within the BSA. The survey will be conducted in the springtime, during peak blooming season, when the Crotch bumble bee is more likely to be encountered. High definition cameras will be utilized during survey efforts to capture unique physical characteristics of each bee species encountered. Photos will be submitted to online databases that employ bee experts, such as *Bumble Bee Watch* or *Bee Spotters*, as suggested in the *Survey Protocols for the Rusty Patched Bumble Bee*. If the Crotch bumble bee is presumed

present within the BSA, additional coordination with CDFW will occur to determine appropriate measures to avoid impacts to the special-status bee species.

5. Conclusions and Regulatory Determinations

5.1 Federal Endangered Species Act Consultation Summary

An official list of federally listed plant and animal species was obtained from USFWS on November 3, 2020 (Appendix A). The database search returned 8 Federally listed plant and wildlife species that may occur within the vicinity of the Project. Table 2 lists these species, their potential to occur within the BSA, their status, and the Project determination for effects on those species with potential to occur. The Project is located outside of NMFS jurisdiction; therefore, a NMFS species list is not required and no impacts to NMFS species are anticipated.

Table 5. Federally Listed Species Potentially Occurring within the Project Area

Common Name	Scientific Name	Potential	Federal Status	Determination
California red-legged frog	*Rana draytonii*	Presumed Absent	Threatened	No Effect
California condor	*Gymnogyps californianus*	Presumed Absent	Endangered	No Effect
Delta smelt	*Hypomesus transpacificus*	Presumed Absent	Threatened	No Effect
Fisher – Southern Sierra Nevada ESU	*Pekania pennanti pop. 2*	Presumed Absent	Endangered	No Effect
San Joaquin kit fox	*Vulpes macrotis mutica*	Presumed Absent	Endangered	No Effect
Blunt-nosed leopard lizard	*Gambelia silus*	Presumed Absent	Endangered	No Effect
Keck's checkerbloom	*Sidalcea keckii*	Presumed Absent	Endangered	No Effect
San Joaquin adobe sunburst	*Pseudobahia peirsonii*	Presumed Absent	Threatened	No Effect

5.2 Essential Fish Habitat Consultation Summary

The Project is outside of NMFS Essential Fish Habitat (EFH) boundaries. No consultation with NMFS regarding EFH is required.

5.3 California Endangered Species Act Consultation

A list of state listed plant and animal species was obtained from CDFW on November 3, 2020 (Appendix B). After habitat assessments, literature review, and biological surveys, it was determined that one species listed as a candidate endangered species, the Crotch bumble bee, has a low to moderate potential to occur within the BSA. An analysis of Project impacts and available bumble bee habitat concluded that with the implementation of Project avoidance and minimization measure **BIO-10**, the Project will not result in the take of Crotch bumble bee. With the avoidance of take, the Project does not anticipate that a CDFW Section 2081 Incidental Take Permit (ITP) for Crotch bumble bee will be necessary, and no further consultation is necessary.

5.4 Wetlands and Other Waters Coordination Summary

White River is considered a water of the U.S. and State and is under the jurisdiction of the USACE and the Central Valley RWQCB. The channel and the associated riparian corridor are also under the jurisdiction of CDFW. Associated regulatory permits would be required for Project activities

and effects within these jurisdictional habitats. Waters and waters coordination will include a §401 Water Quality Certification from the Central Valley RWQCB, a §404 permit from the USACE, and a §1602 Streambed Alteration Agreement from CDFW.

5.5 Invasive Species

In February 1999, EO 13112 was signed, requiring Federal agencies to work on preventing and controlling the introduction and spread of invasive species. The following protective measures would be included in the Project plans to ensure that invasive species are not introduced or spread.

BIO-11: Prior to arrival at the Project site and prior to leaving the Project site, construction-related equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

BIO-12: If hydroseed and plant mixes are used during or post-construction, hydroseed mixes must consist of a biologist approved plant palate seed mix of native species sourced locally to the Project area.

5.6 Other

5.6.1 Migratory Bird Treaty Act

Native birds, protected under the MBTA and similar provisions under CFG Code, currently nest or have the potential to nest within the BSA. During biological surveys, habitat for nesting birds was identified within the BSA including the riparian vegetation along White River and scattered tree habitat within the BSA. The following avoidance and minimization measures would be implemented to avoid impacts to protected migratory birds to the extent practicable.

BIO-13: The construction contractor shall avoid removing any vegetation during the nesting bird season (February 1 through August 31). If vegetation must be removed within the nesting season, a pre-construction nesting bird survey must be conducted no more than 3 days prior to vegetation removal. The vegetation must be removed within 3 days from the nesting bird survey.

Where practicable, a minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with the County and CDFW) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist and approved by the County and CDFW.

5.6.2 General Wildlife

To prevent harm to local wildlife, the following avoidance and minimization measures would be implemented.

BIO-14: All construction-related crew members will allow wildlife enough time to escape initial clearing and grubbing activities. Initial clearing and grubbing must be accomplished through the use of hand tools.

BIO-15: The contractor must dispose of all food-related trash in closed containers and must remove it from the Project area each day during construction. Construction-related personnel must not feed or attract wildlife to the Project area.

BIO-16: The contractor must not apply rodenticide or herbicide within the Project area during construction-related activities.

6. References

Calflora 2020	Calflora. 2020. Information on Wild California Plants. Available at: <https://www.calflora.org/> (accessed 11/3/20).
Cal-Herps 2020	Cal-Herps. 2020. California Herps: A Guide to the Amphibians and Reptiles of California. Available at: <http://www.californiaherps.com/> (accessed 11/3/2020).
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CNPS 2020	California Native Plant Society. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available at: <http://www.rareplants.cnps.org/> (accessed 11/3/2020).
Grenfell 1988	Grenfell Jr., W.E. 1988. A Guide to Wildlife Habitats of California – Valley Foothill Riparian.
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Jepson 2020a	The Jepson Herbarium. 2020. Jepson eFlora: Geographic Subdivisions. Available at: <https://ucjeps.berkeley.edu/eflora/geography.html> (accessed 11/4/2020).
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TCAG 2018	Tulare County Association of Governments. 2018. Mitigation Monitoring and Report Program. Available at: <https://tularecog.org/tcag/planning/environmental-planning/environmental-mitigation/> (accessed 11/5/2020).
Tulare County 2020	Tulare County Resource Management Agency. 2020. Adopted Tulare County General Plan 2030. Available at: <http://generalplan.co.tulare.ca.us/> (accessed 11/4/2020).
U.S. Climate Data 2020	United States Climate Data. 2020. Weather History – Glennville. Available at: <https://www.usclimatedata.com/climate/glennville/california/united-states/usca0427> (accessed 11/5/2020).

USACE 2008a United States Army Corps of Engineers. 2008. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual*. Available at: <http://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/Ordinary_High_Watermark_Manual_Aug_2008.pdf>

USACE 2008b United States Army Corps of Engineers. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) Available at: <http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg_supp/trel08-28.pdf>

Xerces 2018 The Xerces Society. 2018. Petition to List Four Species of Bumblebees as Endangered Species.

Zeiner 1990 Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California.

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Appendix A. USFWS Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: November 03, 2020
Consultation Code: 08ESMF00-2021-SLI-0278
Event Code: 08ESMF00-2021-E-00730
Project Name: M109 White River Bridge

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2021-SLI-0278

Event Code: 08ESMF00-2021-E-00730

Project Name: M109 White River Bridge

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: M109 White River Bridge

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/35.81237987260563N118.84435411303008W

Counties: Tulare, CA

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Fisher *Pekania pennanti* Population: SSN DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3651	Endangered
San Joaquin Kit Fox *Vulpes macrotis mutica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered

Reptiles

NAME	STATUS
Blunt-nosed Leopard Lizard *Gambelia silus*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/625

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii*	Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/2891
Species survey guidelines:
https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus*	Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/321

Flowering Plants

NAME	STATUS
Keck's Checker-mallow *Sidalcea keckii*	Endangered

There is **final** critical habitat for this species. Your location is outside the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/5704

San Joaquin Adobe Sunburst *Pseudobahia peirsonii*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/2931

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix B. CNDDB Species List

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (White River (3511877) OR Posey (3511876) OR Quincy School (3511878) OR Fountain Springs (3511888) OR Gibbon Peak (3511887) OR California Hot Springs (3511886) OR Glennville (3511866) OR Sand Canyon (3511868) OR Woody (3511867))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
aromatic canyon gooseberry *Ribes menziesii var. ixoderme*	PDGRO02104	None	None	G4T2	S2	1B.2
Bakersfield cactus *Opuntia basilaris var. treleasei*	PDCAC0D055	Endangered	Endangered	G5T1	S1	1B.1
Berry's morning-glory *Calystegia malacophylla var. berryi*	PDCON040K2	None	None	G4G5T2Q	S2	3.3
Big Tree Forest *Big Tree Forest*	CTT84250CA	None	None	G3	S3.2	
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S3	SSC
calico monkeyflower *Diplacus pictus*	PDSCR1B240	None	None	G2	S2	1B.2
California legless lizard *Anniella spp.*	ARACC01070	None	None	G3G4	S3S4	SSC
California wolverine *Gulo gulo*	AMAJF03010	Proposed Threatened	Threatened	G4	S1	FP
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
delicate bluecup *Githopsis tenella*	PDCAM07070	None	None	G2	S2	1B.3
Fisher - Southern Sierra Nevada ESU *Pekania pennanti pop. 2*	AMAJF01022	Endangered	Threatened	G5T1	S1	SSC
foothill yellow-legged frog *Rana boylii*	AAABH01050	None	Endangered	G3	S3	SSC
Greenhorn fritillary *Fritillaria brandegeei*	PMLIL0V040	None	None	G2G3	S2S3	1B.3
Greenhorn Mountains slender salamander *Batrachoseps altasierrae*	AAAAD02200	None	None	G4	S3S4	
grey-leaved violet *Viola pinetorum ssp. grisea*	PDVIO04431	None	None	G4G5T3	S3	1B.2
Keck's checkerbloom *Sidalcea keckii*	PDMAL110D0	Endangered	None	G2	S2	1B.1
Kern shoulderband *Helminthoglypta callistoderma*	IMGASC2080	None	None	G1	S1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Madera leptosiphon *Leptosiphon serrulatus*	PDPLM09130	None	None	G3	S3	1B.2
Morrison's blister beetle *Lytta morrisoni*	IICOL4C040	None	None	G1G2	S1S2	
Northern Claypan Vernal Pool *Northern Claypan Vernal Pool*	CTT44120CA	None	None	G1	S1.1	
Piute Mountains navarretia *Navarretia setiloba*	PDPLM0C0S0	None	None	G2	S2	1B.1
San Joaquin adobe sunburst *Pseudobahia peirsonii*	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
San Joaquin kit fox *Vulpes macrotis mutica*	AMAJA03041	Endangered	Threatened	G4T2	S2	
San Joaquin woollythreads *Monolopia congdonii*	PDASTA8010	Endangered	None	G2	S2	1B.2
Sierra night lizard *Xantusia vigilis sierrae*	ARACK01032	None	None	G5T1	S1	SSC
spiny-sepaled button-celery *Eryngium spinosepalum*	PDAPI0Z0Y0	None	None	G2	S2	1B.2
Springville clarkia *Clarkia springvillensis*	PDONA05120	Threatened	Endangered	G2	S2	1B.2
striped adobe-lily *Fritillaria striata*	PMLIL0V0K0	None	Threatened	G1	S1	1B.1
Sycamore Alluvial Woodland *Sycamore Alluvial Woodland*	CTT62100CA	None	None	G1	S1.1	
Townsend's big-eared bat *Corynorhinus townsendii*	AMACC08010	None	None	G3G4	S2	SSC
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
western pearlshell *Margaritifera falcata*	IMBIV27020	None	None	G4G5	S1S2	
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western spadefoot *Spea hammondii*	AAABF02020	None	None	G3	S3	SSC

Record Count: 35

Appendix C. CNPS Species List

CNPS California Native Plant Society

Inventory of Rare and Endangered Plants

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

16 matches found. *Click on scientific name for details*

Search Criteria
California Rare Plant Rank is one of [1A, 1B, 2A, 2B, 3], Found in Quads 3511888, 3511887, 3511886, 3511878, 3511877, 3511876, 3511868 3511867 and 3511866;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Calystegia malacophylla var. berryi	Berry's morning-glory	Convolvulaceae	perennial rhizomatous herb	Jul-Aug	3.3	S2	G4G5T2Q
Clarkia springvillensis	Springville clarkia	Onagraceae	annual herb	(Mar)Apr-Jul	1B.2	S2	G2
Diplacus pictus	calico monkeyflower	Phrymaceae	annual herb	Mar-May	1B.2	S2	G2
Eryngium spinosepalum	spiny-sepaled button-celery	Apiaceae	annual / perennial herb	Apr-Jun	1B.2	S2	G2
Fritillaria brandegeei	Greenhorn fritillary	Liliaceae	perennial bulbiferous herb	Apr-Jun	1B.3	S2S3	G2G3
Fritillaria striata	striped adobe-lily	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.1	S1	G1
Galium angustifolium ssp. onycense	Onyx Peak bedstraw	Rubiaceae	perennial herb	Apr-Jul	1B.3	S3	G5T3
Githopsis tenella	delicate bluecup	Campanulaceae	annual herb	Apr-Jun	1B.3	S2	G2
Leptosiphon serrulatus	Madera leptosiphon	Polemoniaceae	annual herb	Apr-May	1B.2	S3	G3
Monolopia congdonii	San Joaquin woollythreads	Asteraceae	annual herb	(Jan)Feb-May	1B.2	S2	G2
Navarretia setiloba	Piute Mountains navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G2
Opuntia basilaris var. treleasei	Bakersfield cactus	Cactaceae	perennial stem succulent	Apr-May	1B.1	S1	G5T1
Pseudobahia peirsonii	San Joaquin adobe sunburst	Asteraceae	annual herb	Feb-Apr	1B.1	S1	G1
Ribes menziesii var. ixoderme	aromatic canyon gooseberry	Grossulariaceae	perennial deciduous shrub	Apr	1B.2	S1	G4T1
Sidalcea keckii	Keck's checkerbloom	Malvaceae	annual herb	Apr-May(Jun)	1B.1	S2	G2
Viola pinetorum ssp. grisea	grey-leaved violet	Violaceae	perennial herb	Apr-Jul	1B.2	S3	G4G5T3

Suggested Citation

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 03 November 2020].

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The California Lichen Society
California Natural Diversity Database
The Jepson Flora Project
The Consortium of California Herbaria
CalPhotos

Questions and Comments
rareplants@cnps.org

Appendix D. Botanical Survey Report

BOTANICAL SURVEY REPORT

M109 over White River Bridge Replacement Project
November 2020

Prepared By:

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Prepared For:

Tulare County
Resource Management Agency – Public Works
5961 S. Mooney Blvd.
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Prepared By: _____ Date: 11/5/2020

Andrew Dellas, Associate Biologist
Dokken Engineering
(916) 858-0642

Executive Summary

The County of Tulare (County) in cooperation with the California Department of Transportation (Caltrans), proposes to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133). The scope of work would include replacing the bridge in an adjacent but likely off alignment location, approach roadway work, grading, cut and fill, equipment staging areas, drainage, right-of-way acquisition, overhead/aerial utility relocation, and vegetation removal. A Biological Study Area (BSA) was established around the project area. Vegetation communities and habitat types within the BSA and the potential for special status species to occur within the BSA were evaluated.

Prior to field work, literature research was conducted through the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database (USFWS 2020), the California Department of Fish and Wildlife (CDFW) *California Natural Diversity Database* (CNDDB) (CDFW 2020), and the California Native Plant Society (CNPS) *Electronic Inventory of Rare and Endangered Plants* (CNPS 2020) (**Appendix A: Species Lists**) to identify habitats and special-status plant species having the potential to occur within the BSA. Based upon preliminary literature research and potentially suitable habitat within the BSA, two (2) special status plant species: Keck's checkerbloom (*Sidalcea keckii*) and San Joaquin Adobe Sunburst (*Pseudobahia peirsonii*) were determined to have a low to moderate potential to occur within the BSA. Focused botanical surveys were conducted during the species blooming season (early, middle and late blooming season surveys) on April 1, April 23, and May 14, 2020.

2020 Focused Botanical Survey Dates

- April 1, 2020 – Andrew Dellas, Dokken Engineering Associate Biologist
- April 23, 2020 – Andrew Dellas, Dokken Engineering Associate Biologist
- May 14, 2020 – Andrew Dellas, Dokken Engineering Associate Biologist

No special status plant specimens were identified within the BSA. Therefore, all special status plants species that were identified as having a potential to occur are presumed absent from the BSA.

Table of Contents

Acronyms and Abbreviations

BMP	Best Management Practice
BSA	Biological Study Area
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	County of Tulare
FESA	Federal Endangered Species Act
IPaC	Information for Planning and Consultation
IS/MND	Initial Study/Mitigated Negative Declaration
M109	Mountain Road 109
NEPA	National Environmental Policy Act
NRCS	National Resource Conservation Service
Project	M348 South Fork Kaweah River Bridge Replacement Project
Project	Mountain Road 109 over White River Bridge Replacement Project
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

Chapter 1. Introduction

The proposed M109 over White River Bridge Replacement Project (Project) is approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California (**Appendix B. Supporting Maps and Materials**). The Project occurs within Township 18 South, Range 29 East of the White River California United States Geographic Survey (USGS) 7.5-minute topographic quadrangle.

The Survey Area for this Botanical Survey Report includes all areas within the BSA. The total area of the BSA is approximately 9 acres. The BSA was created by establishing an approximately 100-foot buffer around all areas that will be temporarily or permanently impacted by the Project, and includes the location of the bridge, construction easements, and potential staging areas.

The purpose of this report is to identify and describe natural communities and botanical resources within the BSA and provide results of the 2019 focused botanical survey results to determine potential Project effects to special status plant species.

1.1 Project Description

Tulare County, in cooperation with Caltrans, is proposing to replace the existing M109 over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility.

The bridge is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California (**Appendix B. Supporting Maps and Materials**). The existing bridge was constructed in 1939 and is not eligible for the National Register of Historic Places. The structure is a two-span steel girder with timber deck and asphalt over bridge structure supported on spread footings. The bridge measures approximately 40 feet in total length with a total width of 16 feet and clear width between railing of 11 feet.

The bridge is predominantly used by local resident's vehicles and agricultural-related equipment and the roadway narrows to one lane of un-signalized bi-directional traffic over the bridge. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 (out of a potential 100 rating) and was flagged structurally deficient due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads.

Temporary construction easements are needed throughout the project area and construction staging would take place within County right-of-way and adjacent privately owned parcels. Minor permanent right-of-way acquisitions are anticipated.

The total estimated cost to implement the Build Alternative is approximately $2.1 million. The project is included in the Fiscal Years 2019 Federal Transportation Improvement Program and is funded through the 2016/17 – 2021/22 Federal Highway Bridge Program.

The Build Alternative would replace the existing M109 bridge crossing over White River with a new two-lane bridge structure to match the required minimum width to carry two lanes of traffic. The approximate limits of the project are approximately 500 feet northwest and 300 feet southeast of the existing M109 crossing of White River. The project would conform to the existing roadway width and would provide an improved road alignment for safety. The bridge structure would

consist of a concrete slab bridge. The proposed bridge would be approximately 100 feet long and would be no greater than 18 feet in height when measured from the creek bottom.

The White River channel would be graded to restore natural channel contours. Rock slope protection may be necessary around the bridge abutments for scour protection.

Temporary construction easements would be needed for bridge construction and construction staging areas. Permanent slope easements may be required to conform the finished grades of the maintenance roads along each side of the creek to the bridge profile grade. Right-of-way acquisition and utility relocations are anticipated.

M109 and driveway access would remain open during construction. Due to the length of a potential detour route, stage construction would be utilized in order to keep the roadway open to traffic during construction. Construction is anticipated to begin in 2024 and would take approximately 12 months to complete.

The project is subject to both California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) processes. The County is the lead agency under CEQA and Caltrans is the lead agency under NEPA.

1.1.1. Purpose

The purpose of the project is to:

- Replace the existing M109 over White River Bridge with a new two-land bridge;
- Provide a structure that meets current design standards;
- Provide improved safety and operations on the facility; and
- Provide improved access for local use of agricultural equipment.

1.1.2. Need

The project is needed because the existing bridge has a sufficiency rating of 4.5 and was flagged structurally deficient due to the bridge's low load carrying capacity. The existing bridge is narrow and only capable of carrying 1 lane of traffic.

1.2. Description of the Existing Physical and Biological Conditions

The following sections discuss ecological conditions of the region and biological resources present within the BSA.

1.2.1. Physical Conditions

1.2.1.1. Topography

The BSA is within the USGS White River 7.5-minute quadrangle. The elevation within the BSA ranges from approximately 1,080 to 1,150 feet above mean sea level. The topography within the BSA is hilly, located in the cismontane foothills of the Sierra Nevada.

1.2.1.2. Soils

Soil within the Project impact area consists of Blasingame sandy loam, 15 to 30 percent slopes (24.3%), Blasingame sandy loam, 30 to 50 percent slopes (57.1%), and Cieneba-Rock outcrop complex, 15 to 75 percent slopes (18.6%) (**Appendix B. Supporting Maps and Materials**).

1.2.1.3. HYDROLOGICAL RESOURCES

Based on field survey results, the White River USGS 7.5-minute quadrangle topographic map, and the USFWS National Wetland Inventory, the water features found within the BSA are the White River and seasonal wetland.

1.2.2. Biological Conditions in the Biological Study Area

1.2.2.1. VEGETATION COMMUNITIES

Dominant vegetation communities within the BSA include annual grassland, riparian woodland, and seasonal wetland. The dominant species within the BSA are non-native grass species such as ripgut brome (*Bromus diandrus*). Vegetation found within the montane riparian habitat includes canopy species such as willows (*Salix spp.*), California buckeye (*Aesculus californica*), and California sycamore (*Platanus racemosa*). The understory is composed of lush herbs and shrubs. A complete list of plant species observed within the BSA during focused botanical surveys is documented in Chapter 3 “Results”.

1.2.2.2. WILDLIFE

Wildlife anticipated to occur within the BSA are wildlife species typically found in annual grassland, riparian woodland, and seasonal wetland habitats. Adjacent habitat is intact with natural habitats and has very little urban disturbances.

Chapter 2. Methods

Prior to field work, literature research was conducted through the USFWS IPaC Databas (USFWS 2020), the CDFW CNDDB (CDFW 2020), and the CNPS *Electronic Inventory of Rare and Endangered Plants* (CNPS 2020) (**Appendix A. Species Lists**) to identify habitats and special-status plant species having the potential to occur within the BSA.

A series of focused botanical surveys were conducted in the field during the 2020 blooming season for all identified special status plant species with the potential to occur within the BSA, following methodology of the CDFW (2018) *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. This included multiple visits in early, mid and late season to capture the floristic diversity within the BSA and to determine if special status plants were present, during the flowering and fruiting stages according to the rare plants blooming periods (Jepson eFlora 2020). No adverse conditions within the BSA were identified and all surveys were conducted during appropriate weather and temperature conditions. The following is a list of survey dates and field surveyors present:

2020 Focused Botanical Survey Dates

- April 1, 2020 – Andrew Dellas, Dokken Engineering Associate Biologist
- April 23, 2020 – Andrew Dellas, Dokken Engineering Associate Biologist
- May 14, 2020 – Andrew Dellas, Dokken Engineering Associate Biologist

Chapter 3. Results

3.1. Focused Botanical Survey Results

Preliminary literature research was conducted to determine special status plant species with the potential to occur in the vicinity of the Project. A review of USFWS, CNDDB, and CNPS online databases concluded that 16 special status plant species are known to occur within the nine quad USGS 7.5-minute quadrangle search area. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. Based on preliminary research, aerial reconnaissance, and habitat assessments within the BSA, two special status plant species: Keck's checkerbloom (*Sidalcea keckii*) and San Joaquin adobe sunburst (*Pseudobahia peirsonii*) were determined to have a low to moderate potential to occur within the BSA. Keck's checkerbloom is an annual herb that is listed as endangered under the Federal Endangered Species Act (FESA). San Joaquin adobe sunburst is an annual herb that is listed as threatened under FESA and endangered under the California Endangered Species Act (CESA). No other special status plant species were determined to have potential to occur within the BSA.

During the 2020 focused botanical surveys no Keck's checkerbloom, San Joaquin adobe sunburst, or any other sensitive plant species were observed during the surveys. Construction of the Project will not negatively impact Keck's checkerbloom or San Joaquin adobe sunburst. Table 1 below provides a list of all plant species identified within the BSA.

Table 1: Plant Species Observed within the BSA

Common Name	Scientific Name	Native (N) / Non-native (X)
Ferns		
Goldback fern	*Pentagramma triangularis*	N
Grasses		
Compact brome	*Bromus madrintensis*	X
Foxtail barley	*Hordeum murinum*	X – [moderate]*
Ripgut brome	*Bromus diandrus*	X – [moderate]*
Soft chess brome	*Bromus hordeaceus*	X – [limited]*
Herbs		
Bedstraw	*Galium sp.*	N
Blue water-speedwell	*Veronica anagallis-aquatica*	X
Bristly fiddleneck	*Amsinckia tessellata*	N
California goosefoot	*Chenopodium californicum*	N
California mugwort	*Artemisia douglasiana*	N
Caterpillar scorpionweed	*Phacelia cicutaria*	N
Chick lupine	*Lupinus microcarpus*	N
Common chickweed	*Stellaria media*	X
Curly dock	*Rumex crispus*	X – [limited]*
Cutleaf gernanium	*Geranium dissectum*	X – [limited]*
Deerweed	*Acmispon glaber*	N
Fiesta flower	*Pholistoma auritum*	N
Jimsonweed	*Datura wrightii*	N
Milk thistle	*Silybum marianum*	X – [limited]*
Miner's lettuce	*Claytonia parviflora*	N
Queen Anne's lace	*Daucus carota*	X

Red stem filaree	*Erodium cicutarium*	X – [limited]*
Rough cocklebur	*Xanthium strumarium*	N
Rusty popcornflower	*Plagiobothrys nothofulvus*	N
Sky lupine	*Lupinus nanus*	N
Spearmint	*Mentha spicata*	X
Spike rush	*Eleocharis sp.*	N
Stinging nettle	*Urtica dioica*	N
Sweetclover	*Melilotus sp.*	X
Tumble mustard	*Sisymbrium altissimum*	X
Water smartweed	*Persicaria amphibia*	N
Shrubs		
Azalea	*Rhododendron sp.*	N
Elderberry	*Sambucus sp.*	N
Mule fat	*Baccharis salicifolia*	N
Silver bush lupine	*Lupinus albifrons*	N
Trees		
California buckeye	*Aesculus californica*	N
California sycamore	*Platanus racemosa*	N
Fig	*Ficus sp.*	X
Gooding's willow	*Salix gooddingii*	N
Interior live oak	*Quercus wislizeni*	N
Red willow	*Salix laevigata*	N
Tree of heaven	*Ailanthus altissima*	X – [moderate]*
Valley oak	*Quercus lobata*	N

*California Invasive Plant Council Invasive Rating

3.2. Project Impacts to Special Status Plants

No special status plant species were identified during the 2020 focused botanical surveys within the Project BSA; therefore, no impacts to special status plant species would occur due to Project implementation.

3.3. Avoidance and Minimization Efforts for Special Status Plant Species

The 2020 focused botanical surveys determined that no special status plant species are present within the Project BSA. The Project will have no impacts to special status plant species; therefore, no further avoidance, minimization and/or mitigation measures are necessary or proposed.

Chapter 4. References

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Jepson Eflora. 2020. Jepson eFlora: Geographic subdivisions. Available at: <http://ucjeps.berkeley.edu/eflora/geography.html> (accessed 11/3/2020).

Appendix A – USFWS, CNDDB, and CNPS Species List

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (White River (3511877) OR Posey (3511876) OR Quincy School (3511878) OR Fountain Springs (3511888) OR Gibbon Peak (3511887) OR California Hot Springs (3511886) OR Glennville (3511866) OR Sand Canyon (3511868) OR Woody (3511867))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
aromatic canyon gooseberry *Ribes menziesii var. ixoderme*	PDGRO02104	None	None	G4T2	S2	1B.2
Bakersfield cactus *Opuntia basilaris var. treleasei*	PDCAC0D055	Endangered	Endangered	G5T1	S1	1B.1
Berry's morning-glory *Calystegia malacophylla var. berryi*	PDCON040K2	None	None	G4G5T2Q	S2	3.3
Big Tree Forest *Big Tree Forest*	CTT84250CA	None	None	G3	S3.2	
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S3	SSC
calico monkeyflower *Diplacus pictus*	PDSCR1B240	None	None	G2	S2	1B.2
California legless lizard *Anniella spp.*	ARACC01070	None	None	G3G4	S3S4	SSC
California wolverine *Gulo gulo*	AMAJF03010	Proposed Threatened	Threatened	G4	S1	FP
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
delicate bluecup *Githopsis tenella*	PDCAM07070	None	None	G2	S2	1B.3
Fisher - Southern Sierra Nevada ESU *Pekania pennanti pop. 2*	AMAJF01022	Endangered	Threatened	G5T1	S1	SSC
foothill yellow-legged frog *Rana boylii*	AAABH01050	None	Endangered	G3	S3	SSC
Greenhorn fritillary *Fritillaria brandegeei*	PMLIL0V040	None	None	G2G3	S2S3	1B.3
Greenhorn Mountains slender salamander *Batrachoseps altasierrae*	AAAAD02200	None	None	G4	S3S4	
grey-leaved violet *Viola pinetorum ssp. grisea*	PDVIO04431	None	None	G4G5T3	S3	1B.2
Keck's checkerbloom *Sidalcea keckii*	PDMAL110D0	Endangered	None	G2	S2	1B.1
Kern shoulderband *Helminthoglypta callistoderma*	IMGASC2080	None	None	G1	S1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Madera leptosiphon *Leptosiphon serrulatus*	PDPLM09130	None	None	G3	S3	1B.2
Morrison's blister beetle *Lytta morrisoni*	IICOL4C040	None	None	G1G2	S1S2	
Northern Claypan Vernal Pool *Northern Claypan Vernal Pool*	CTT44120CA	None	None	G1	S1.1	
Piute Mountains navarretia *Navarretia setiloba*	PDPLM0C0S0	None	None	G2	S2	1B.1
San Joaquin adobe sunburst *Pseudobahia peirsonii*	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
San Joaquin kit fox *Vulpes macrotis mutica*	AMAJA03041	Endangered	Threatened	G4T2	S2	
San Joaquin woollythreads *Monolopia congdonii*	PDASTA8010	Endangered	None	G2	S2	1B.2
Sierra night lizard *Xantusia vigilis sierrae*	ARACK01032	None	None	G5T1	S1	SSC
spiny-sepaled button-celery *Eryngium spinosepalum*	PDAPI0Z0Y0	None	None	G2	S2	1B.2
Springville clarkia *Clarkia springvillensis*	PDONA05120	Threatened	Endangered	G2	S2	1B.2
striped adobe-lily *Fritillaria striata*	PMLIL0V0K0	None	Threatened	G1	S1	1B.1
Sycamore Alluvial Woodland *Sycamore Alluvial Woodland*	CTT62100CA	None	None	G1	S1.1	
Townsend's big-eared bat *Corynorhinus townsendii*	AMACC08010	None	None	G3G4	S2	SSC
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
western pearlshell *Margaritifera falcata*	IMBIV27020	None	None	G4G5	S1S2	
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western spadefoot *Spea hammondii*	AAABF02020	None	None	G3	S3	SSC

Record Count: 35

CNPS California Native Plant Society

Inventory of Rare and Endangered Plants

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

16 matches found. *Click on scientific name for details*

Search Criteria
California Rare Plant Rank is one of [1A, 1B, 2A, 2B, 3], Found in Quads 3511888, 3511887, 3511886, 3511878, 3511877, 3511876, 3511868 3511867 and 3511866;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Calystegia malacophylla var. berryi	Berry's morning-glory	Convolvulaceae	perennial rhizomatous herb	Jul-Aug	3.3	S2	G4G5T2Q
Clarkia springvillensis	Springville clarkia	Onagraceae	annual herb	(Mar)Apr-Jul	1B.2	S2	G2
Diplacus pictus	calico monkeyflower	Phrymaceae	annual herb	Mar-May	1B.2	S2	G2
Eryngium spinosepalum	spiny-sepaled button-celery	Apiaceae	annual / perennial herb	Apr-Jun	1B.2	S2	G2
Fritillaria brandegeei	Greenhorn fritillary	Liliaceae	perennial bulbiferous herb	Apr-Jun	1B.3	S2S3	G2G3
Fritillaria striata	striped adobe-lily	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.1	S1	G1
Galium angustifolium ssp. onycense	Onyx Peak bedstraw	Rubiaceae	perennial herb	Apr-Jul	1B.3	S3	G5T3
Githopsis tenella	delicate bluecup	Campanulaceae	annual herb	Apr-Jun	1B.3	S2	G2
Leptosiphon serrulatus	Madera leptosiphon	Polemoniaceae	annual herb	Apr-May	1B.2	S3	G3
Monolopia congdonii	San Joaquin woollythreads	Asteraceae	annual herb	(Jan)Feb-May	1B.2	S2	G2
Navarretia setiloba	Piute Mountains navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G2
Opuntia basilaris var. treleasei	Bakersfield cactus	Cactaceae	perennial stem succulent	Apr-May	1B.1	S1	G5T1
Pseudobahia peirsonii	San Joaquin adobe sunburst	Asteraceae	annual herb	Feb-Apr	1B.1	S1	G1
Ribes menziesii var. ixoderme	aromatic canyon gooseberry	Grossulariaceae	perennial deciduous shrub	Apr	1B.2	S1	G4T1
Sidalcea keckii	Keck's checkerbloom	Malvaceae	annual herb	Apr-May(Jun)	1B.1	S2	G2
Viola pinetorum ssp. grisea	grey-leaved violet	Violaceae	perennial herb	Apr-Jul	1B.2	S3	G4G5T3

Suggested Citation

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 03 November 2020].

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Glossary

Information
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About the Rare Plant Program
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About CNPS
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Contributors
The Calflora Database
The California Lichen Society
California Natural Diversity Database
The Jepson Flora Project
The Consortium of California Herbaria
CalPhotos

Questions and Comments
rareplants@cnps.org

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: November 03, 2020
Consultation Code: 08ESMF00-2021-SLI-0278
Event Code: 08ESMF00-2021-E-00730
Project Name: M109 White River Bridge

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2021-SLI-0278

Event Code: 08ESMF00-2021-E-00730

Project Name: M109 White River Bridge

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: M109 White River Bridge

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/35.81237987260563N118.84435411303008W

Counties: Tulare, CA

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Fisher *Pekania pennanti* Population: SSN DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3651	Endangered
San Joaquin Kit Fox *Vulpes macrotis mutica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered

Reptiles

NAME	STATUS
Blunt-nosed Leopard Lizard *Gambelia silus*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/625

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii*	Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/2891
Species survey guidelines:
https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus*	Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/321

Flowering Plants

NAME	STATUS
Keck's Checker-mallow *Sidalcea keckii*	Endangered

There is **final** critical habitat for this species. Your location is outside the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/5704

San Joaquin Adobe Sunburst *Pseudobahia peirsonii*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/2931

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

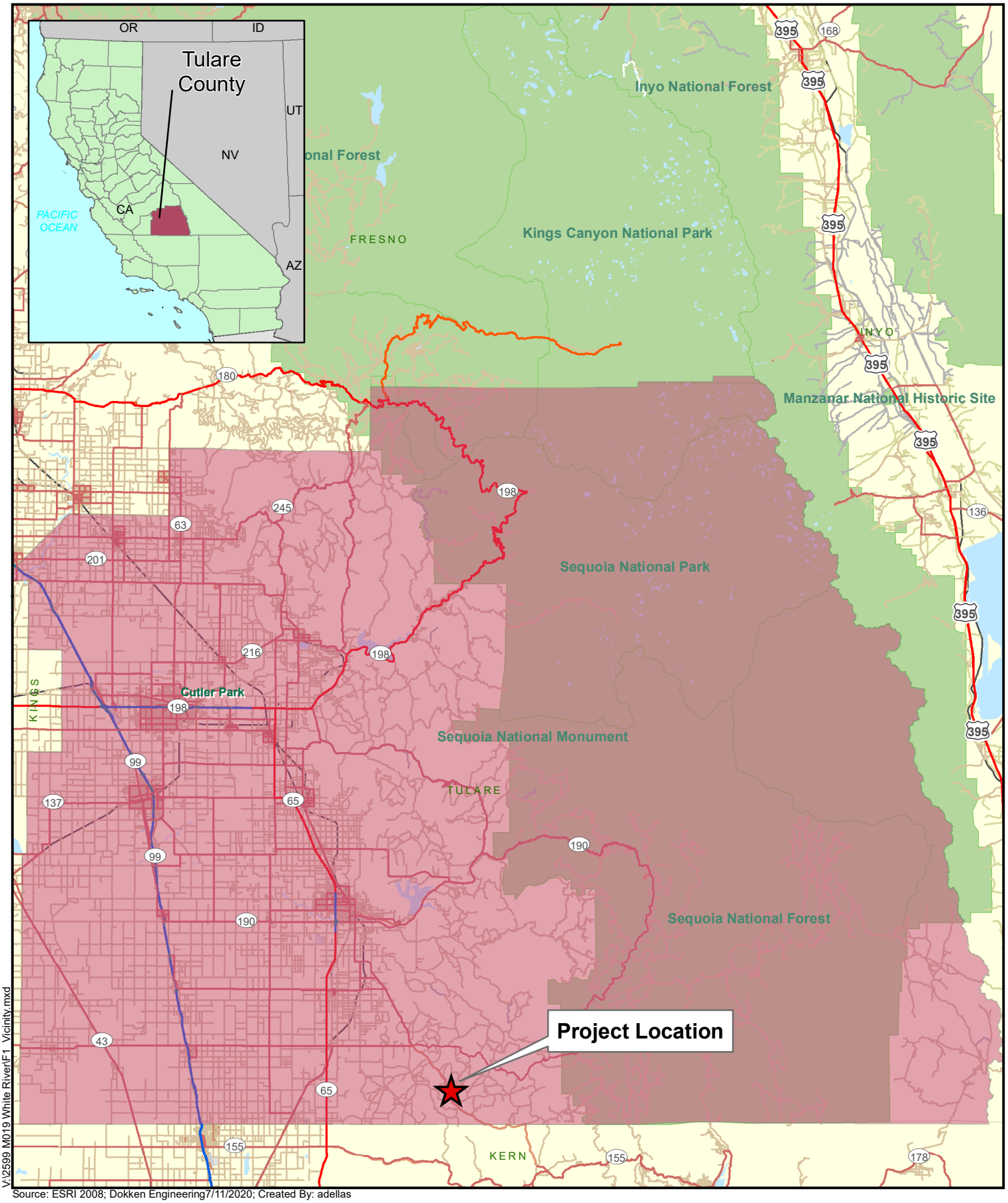
Appendix B - Supporting Maps and Materials

Vicinity Map

Location Map

Survey Area Map

NRCS Report

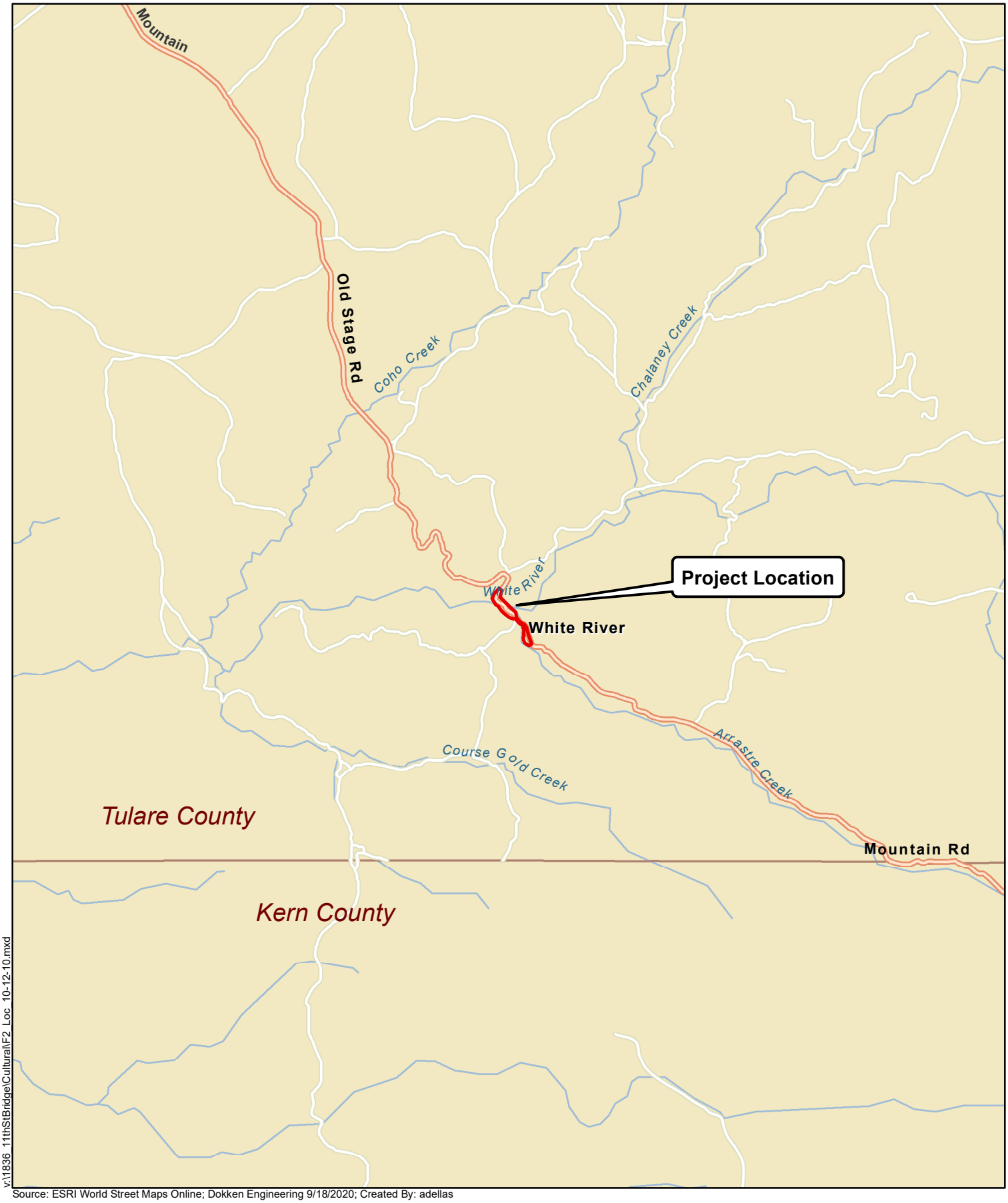


V:\2599 M019 White River\F1 Vicinity.mxd

Source: ESRI 2008; Dokken Engineering7/11/2020; Created By: adellas

0 5 10 15 Miles

FIGURE 1
Project Vicinity
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California



v:\1836_11thStBridge\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 9/18/2020; Created By: adellas

0 0.5 1 1.5 2 Miles

FIGURE 2
Project Location
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California

Figure 3. Project Study Area
BRLS-5946(170)
M109 over White River Bridge Replacement Project
White River, Tulare County, California

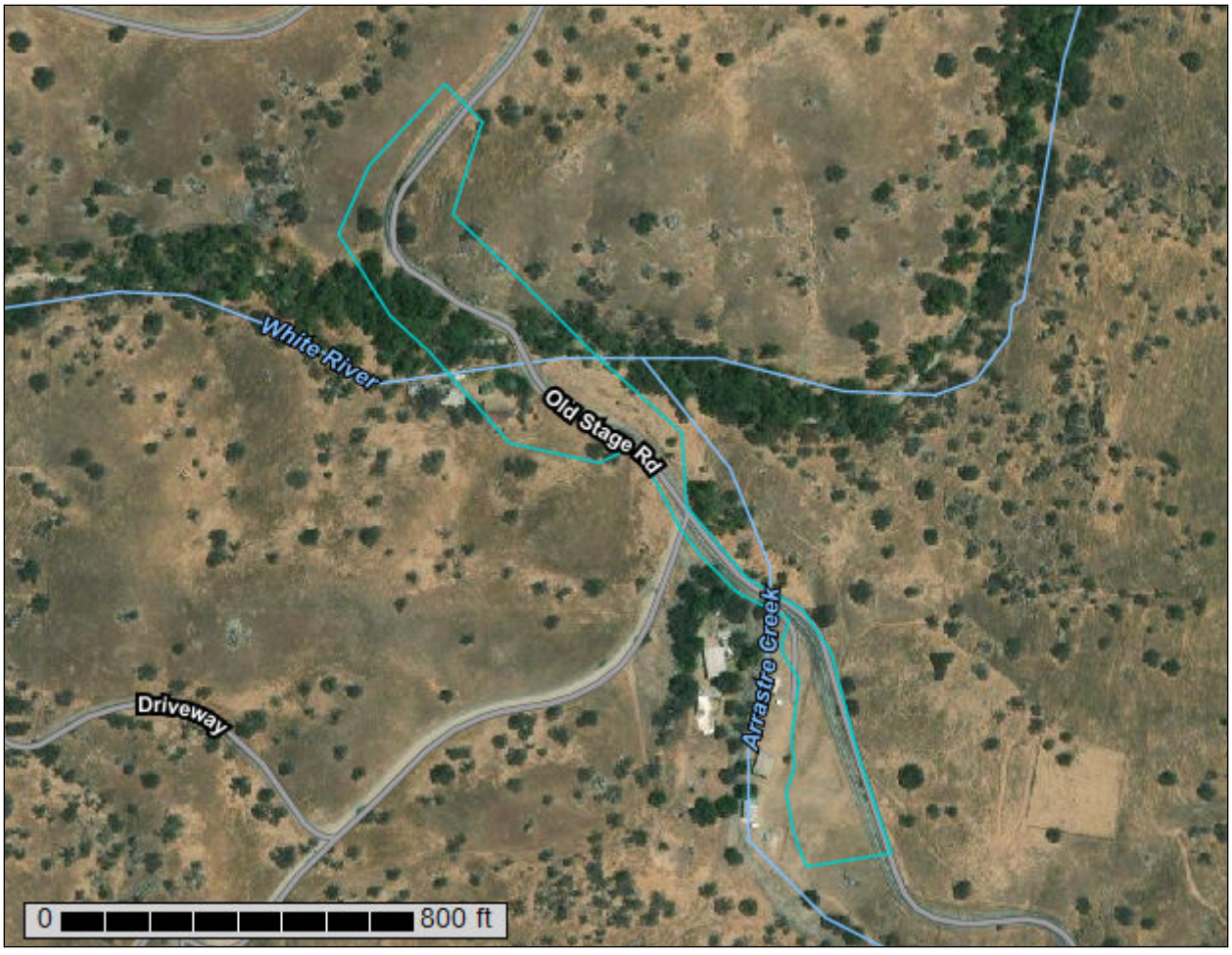
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Tulare County, California, Central Part



November 3, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:3,160 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 45 90 180 270

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Tulare County, California, Central Part
Survey Area Data: Version 14, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 15, 2016—Nov 5, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106	Blasingame sandy loam, 15 to 30 percent slopes	2.0	24.3%
107	Blasingame sandy loam, 30 to 50 percent slopes	4.6	57.1%
116	Cieneba-Rock outcrop complex, 15 to 75 percent slopes	1.5	18.6%
Totals for Area of Interest		**8.1**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Tulare County, California, Central Part

106—Blasingame sandy loam, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: hkcx
Elevation: 500 to 3,500 feet
Mean annual precipitation: 12 to 32 inches
Mean annual air temperature: 55 to 62 degrees F
Frost-free period: 150 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition

Blasingame and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blasingame

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Quartz residuum weathered from diorite

Typical profile

A - 0 to 7 inches: sandy loam
Bt - 7 to 36 inches: sandy clay loam, clay loam, loam
Bt - 7 to 36 inches: bedrock
Bt - 7 to 36 inches:
Cr - 36 to 60 inches:

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very high (about 14.6 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: R018XE003CA - Coarse Loamy
Hydric soil rating: No

Minor Components

Fallbrook
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Auberry
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Cieneba
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Vista
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Unnamed, finer subsoil
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Unnamed, bouldery
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

107—Blasingame sandy loam, 30 to 50 percent slopes

Map Unit Setting
National map unit symbol: hkcy
Elevation: 400 to 4,500 feet
Mean annual precipitation: 9 to 25 inches
Mean annual air temperature: 57 to 66 degrees F
Frost-free period: 150 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition
Blasingame and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blasingame

Setting
Landform: Hills

Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from quartz-diorite

Typical profile

A - 0 to 7 inches: sandy loam
Bt - 7 to 36 inches: sandy clay loam, clay loam, loam
Bt - 7 to 36 inches:
Bt - 7 to 36 inches:

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very high (about 14.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: R018XE003CA - Coarse Loamy
Hydric soil rating: No

Minor Components

Auberry

Percent of map unit: 4 percent
Hydric soil rating: No

Cieneba

Percent of map unit: 4 percent
Hydric soil rating: No

Fallbrook

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed, finer subsoil

Percent of map unit: 4 percent
Hydric soil rating: No

Vista

Percent of map unit: 4 percent
Hydric soil rating: No

116—Cieneba-Rock outcrop complex, 15 to 75 percent slopes

Map Unit Setting

National map unit symbol: hkd7
Elevation: 500 to 4,000 feet
Mean annual precipitation: 12 to 35 inches
Mean annual air temperature: 57 to 64 degrees F
Frost-free period: 200 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Cieneba and similar soils: 55 percent
Rock outcrop: 30 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cieneba

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Concave
Across-slope shape: Convex, concave
Parent material: Residuum weathered from granitoid

Typical profile

A - 0 to 16 inches: coarse sandy loam
Cr - 16 to 60 inches: weathered bedrock

Properties and qualities

Slope: 15 to 75 percent
Depth to restrictive feature: 10 to 20 inches to paralithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R018XE029CA - SHALLOW COARSE LOAMY
Hydric soil rating: No

Description of Rock Outcrop

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8e
Hydric soil rating: No

Minor Components

Unnamed, dark color

Percent of map unit: 4 percent
Hydric soil rating: No

Vista

Percent of map unit: 4 percent
Hydric soil rating: No

Blasingame

Percent of map unit: 4 percent
Hydric soil rating: No

Walong

Percent of map unit: 3 percent
Hydric soil rating: No

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Appendix C – Representative Photographs

Representative Photograph 1. View of White River channel and seasonal wetland in foreground, facing north.

Representative Photograph 2. View of riparian corridor and annual grassland in foreground, facing north.

Representative Photograph 3. View of residential property and annual grassland in foreground, facing southeast.

Representative Photograph 4. View of riparian corridor, annual grassland, and urban/barren land in foreground. View from residential property facing northwest.

Appendix E. Aquatic Resource Delineation Report

AQUATIC RESOURCE DELINEATION REPORT
Mountain Road 109 over White River Bridge Replacement Project
Tulare County Resource Management Agency
Tulare County, California

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Executive Summary

Tulare County (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility. Construction of the new bridge is anticipated to have temporary and permanent effects to the White River and associated seasonal wetlands.

The Project is located in the foothills of the southern Sierra Nevada, within the southern Sierra Nevada Foothills (sSNF) Jepson geographic subdivision (Jepson 2020). This region is characterized floristically by the presence of blue oak and foothill pine woodlands, chaparral, and serpentine habitats. Land use within the Project area is designated as Foothill Agriculture (Tulare County 2020). The Project is located in Section 28, Township 24 South, Range 29 East of the San Bernardino meridian in Tulare County, California. The Project is within the *White River* U.S. Geological Survey (USGS) 7.5-minute quadrangle. The Project site occurs at an elevation of approximately 1,075 feet above mean sea level.

On behalf of the Tulare County, Dokken Engineering conducted a delineation of waters of the United States occurring in the approximately 6.81-acre Project study area. The delineation was conducted in April 2020 with subsequent site visits in November 2020. Delineation procedures followed the technical methods outlined in the Corps of Engineers *Wetlands Delineation Manual* (U.S. Department of the Army, Corps of Engineers, 1987), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual* (USACE 2008a), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008b).

The field investigation confirmed that on-site aquatic resources include, approximately 0.18 acres (820 linear feet) of the White River channel, and approximately 0.02 acres (135 linear feet) of associated seasonal wetlands for a total of approximately 0.20 acres (955 linear feet) of jurisdictional waters of the United States.

Table of Contents

Acronyms and Abbreviations

amsl	Above mean sea level
BSA	Biological Study Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
IS/MND	Initial Study/Mitigated Negative Declaration
NEPA	National Environmental Policy Act
NRCS	National Resource Conservation Service
NWI	National Wetland Inventory
OHWM	Ordinary High Water Mark
RWQCB	Regional Water Quality Control Board
USACE	United States Army Corps of Engineers

Chapter 1. Introduction

Tulare County (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility.

The bridge is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California. The existing bridge was constructed in 1939 and is not eligible for the National Register of Historic Places. The structure is a two span steel girder with timber deck and asphalt over bridge structure supported on spread footings. The bridge measures approximately 40 feet in total length with a total width of 16 feet and clear width between railing of 11 feet.

The bridge is predominantly used by local resident's vehicles and agricultural-related equipment and the roadway narrows to one lane of un-signalized bi-directional traffic over the bridge. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 (out of a potential 100 rating) and was flagged structurally deficient due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads.

Temporary construction easements are needed throughout the project area and construction staging would take place within County right-of-way and adjacent privately owned parcels. Minor permanent right-of-way acquisitions are anticipated.

The total estimated cost to implement the Build Alternative is approximately $2.1 million. The project is included in the Fiscal Years 2019 Federal Transportation Improvement Program (FTIP) and is funded through the 2016/17 – 2021/22 Federal Highway Bridge Program (HBP).

Purpose

The purpose of the project is to:

- Replace the existing M109 over White River Bridge with a new two-land bridge
- Provide a structure that meets current design standards
- Provide improved safety and operations on the facility
- Provide improved access for local use of agricultural equipment

1.2.2 Need

The project is needed because the existing bridge has a sufficiency rating of 4.5 and was flagged structurally deficient due to the bridge's low load carrying capacity. The existing bridge is narrow and only capable of carrying 1 lane of traffic.

Build Alternative

The Build Alternative would replace the existing M109 bridge crossing over White River with a new two-lane bridge structure to match the required minimum width to carry two lanes of traffic. The approximate limits of the project are approximately 500 feet northwest and 300 feet southeast of the existing M109 crossing of White River. The project would conform to the existing roadway

width and would provide an improved road alignment for safety. The bridge structure would consist of a concrete slab bridge. The proposed bridge would be approximately 100 feet long and would be no greater than 18 feet in height when measured from the creek bottom.

The White River channel would be graded to restore natural channel contours. Rock slope protection may be necessary around the bridge abutments for scour protection.

Temporary construction easements would be needed for bridge construction and construction staging areas. Permanent slope easements may be required to conform the finished grades of the maintenance roads along each side of the creek to the bridge profile grade. Right-of-way acquisition and utility relocations are anticipated.

M109 and driveway access would remain open during construction. Due to the length of a potential detour route, stage construction would be utilized in order to keep the roadway open to traffic during construction. Construction is anticipated to begin in 2024 and would take approximately 12 months to complete.

The project is subject to both California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) processes. The County is the lead agency under CEQA and Caltrans is the lead agency under NEPA.

The purpose of this report is to identify and describe aquatic resources in the Survey Area.

This report facilitates efforts to:

1. Avoid or minimize impacts to aquatic resources during the Project design process.
2. Document aquatic resource boundary determinations for review by regulatory authorities.
3. Provide background information regarding aquatic resources in the Survey Area.

Chapter 2. Location

The proposed Project is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California. The Project is located in Section 28, Township 24 South, Range 29 East of the Mount Diablo meridian in Tulare County, California. The Project is within the *White River* U.S. Geological Survey (USGS) 7.5-minute quadrangle. The Project site occurs at an elevation of approximately 1,075 feet above mean sea level (**Appendix B. Project Location Map**).

Prior to field surveys, the project study area (PSA) was defined as all areas that will be temporarily or permanently impacted by the Project, including proposed right of way, construction easements, cut and fill limits, potential staging areas, and access roads. (**Appendix B. Project Features**). The total area of the BSA is approximately 6.81 acres.

Chapter 3. Methods

The jurisdictional delineation was conducted by Dokken Engineering biologist, Andrew Dellas on April 1, 2020, April 23, 2020, May 14, 2020, and November 6, 2020. The purpose of the surveys was conduct general biological surveys and to identify and delineate aquatic resources present within the proposed Project area. The field investigation was conducted in accordance with technical methods outlined in the Corps of Engineers *Wetlands Delineation Manual* (U.S. Department of the Army, Corps of Engineers, 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (U.S. Department of the Army, Corps of Engineers, 2008), and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2010). Observed OHWM and wetland features were mapped in the field with a R1 GNSS Receiver and ArcGIS software. An *Arid West Ephemeral and Intermittent Streams OWHM Datasheet* was completed for each OHWM GPS location, and *Wetland Determination Data Form – Arid West Region* was completed for each wetland data sampling point. OHWM and wetland data points were taken where OWHM and wetland primary indicators were identified and delineated in accordance with the technical methods listed above.

Scientific nomenclature for plants cited in this report is in accordance with The Jepson Manual (Baldwin et al., 2012). The indicator status of plants in this report is in accordance with the National Wetland Plant List (NWPL) (Lichvar et al., 2018).

Chapter 4. Existing Conditions

4.1 Landscape Setting

The Project is located in the foothills of the southern Sierra Nevada, within the southern Sierra Nevada Foothills (sSNF) Jepson geographic subdivision (Jepson 2020). This region is characterized floristically by the presence of blue oak and foothill pine woodlands, chaparral, and serpentine habitats.

The elevation within the BSA ranges from approximately 1,080 to 1,150 feet above mean sea level. In the vicinity of the BSA, the average annual temperatures range from a high of 70 degrees Fahrenheit to a low of 38 degrees Fahrenheit. The average annual precipitation is 17.87 inches (U.S. Climate Data 2020). The topography within the BSA is hilly, located in the cismontane foothills of the Sierra Nevada (**Appendix B. Topographic Map**).

Soil within the Project impact area consists of Blasingame sandy loam, 15 to 30 percent slopes (24.3%), Blasingame sandy loam, 30 to 50 percent slopes (57.1%), and Cieneba-Rock outcrop complex, 15 to 75 percent slopes (18.6%) (Appendix B. NRCS Soil Resource Report).

4.2 Habitat Communities

The BSA is dominated by non-native annual grassland areas and aquatic habitats. Land use within the Project area is designated as Foothill Agriculture (Tulare County 2020). The BSA is composed of five different land cover types – urban/barren, annual grassland, riparian woodland, seasonal wetland, and riverine (**Appendix B. Waters and Vegetation Communities within the BSA**).

Vegetation
Dominant vegetation communities within the BSA include barren/urban, disturbed, riparian, and riverine (**Appendix B. Vegetation Communities within the BSA**; **Appendix C: Representative Photographs; Appendix D. Plant Species Observed**).

Urban/Barren

Urban and barren land within the BSA consists of roadways, road shoulders, man-made structures, and all other land which has been heavily disturbed by human activity within the Project area. Much of the southeastern section of the Project area is composed of urban/barren land due to activity on the residential property in the area, including livestock grazing. Vegetation in this land cover type is either highly disturbed, ornamental, or nonexistent. Within the Project impact area, urban/barren land makes up approximately 4.44 acres (~65%).

Annual Grassland

Annual grassland within the BSA is largely composed of non-native and invasive grass species, including compact brome (*Bromus madritensis*), foxtail barley (*Hordeum murinum*), ripgut brome (*B. diandrus*), and soft chess brome (*B. hordeaceus*). These species are common dominants in non-native annual grasslands across California. This community also contains scattered oak trees (*Quercus spp.*) throughout, as the area transitions to native oak savanna habitat outside of the BSA. In addition, a number of flowering herbs are found throughout this annual grassland. Species include lupins (*Lupinus spp.*), Queen Anne's lace (*Daucus carota*), rusty popcornflower (*Plagiobothrys nothofulvus*), and bristly fiddleneck (*Amsinckia tessellata*). Many of these forbs are

native, in contrast with the invasive grass species that dominate the landscape. A portion of the annual grassland within the BSA is disturbed by urban structures and grazing activity. Within the Project impact area, annual grassland makes up approximately 1.45 acres (~21%).

Riparian Woodland

Riparian woodland is found within the BSA along the White River channel. This riparian corridor is densely vegetated, with the canopy dominated by trees such as willows (*Salix spp.*), California buckeye (*Aesculus californica*), and California sycamore (*Platanus racemosa*). The understory is composed of mostly native shrubs and herbs, including elderberry (*Sambucus sp.*) and stinging nettle (*Urtica dioica*). Within the Project impact area, riparian woodland makes up approximately 0.73 acres (~11%).

Seasonal Wetland

Seasonal wetland occurs in a small area immediately along the White River channel just west of the existing M109 bridge. This habitat type is quite small within the Project area. It is composed of wetland plant species such as spike rush (*Eleocharis sp.)* and water smartweed (*Persicaria amphibia*). Some of these species mix into riverine habitat due to their affinity for inundated habitats and the seasonality of the river channel. Within the Project impact area, seasonal wetland makes up approximately 0.02 acres (<1%).

Riverine

In the BSA, riverine habitat occurs within White River. The riverine channel is sandy and shallow, and water flows seasonally. When the channel is wetted, aquatic species such as water smartweed and blue water-speedwell (*Veronica anagallis-aquatica*) grow within and along the edges of the channel. The channel is shaded by the existing bridge on M109 and the tall canopy of the riparian woodland. Within the Project impact area, riverine makes up approximately 0.18 acres (~3%).

4.3 Aquatic Resources

4.3.1 Overview

Based on field survey results, the USGS *White River* 7½ minute quadrangle topographic map, and the USFWS National Wetland Inventory, the aquatic features within the BSA consist of intermittent riverine and seasonal wetlands (**Appendix B. Vegetation Communities within the BSA**).

4.3.2 Aquatic Features Survey Results

White River

Within the PSA, delineation efforts determined the White River channel exhibited primary OHWM indicators including break in bank, exposed roots, and shelving. Within the PSA, White River exhibits a small pattern of compound channels, where a single low-flow meandering channel is inset into a wider braided channel network. Delineation efforts determined the White River network of channels consists of approximately 0.18 acres (220 linear feet) of riverine habitat (See Table 1 below for acreage details).

Seasonal Wetlands

In addition to the delineation of the OHWM, a delineation to determine the status of seasonal wetland features was conducted above the OHWM of the White River within the PSA. Wetland delineation sampling points determined associated wetlands do occur on the downstream

(eastern) side of the existing M109 White River Bridge for a small area before the River become more channelized. Wetland delineation sampling points determined these areas exhibited all three wetland parameters (hydrophytic vegetation, hydric soils and hydrology). Within the PSA, delineation efforts determined the seasonal wetlands consists of approximately 0.01 acres (135 linear feet)

The Aquatic Resources Delineation Map illustrates aquatic resources and their boundaries within the Project area (**Appendix A. Aquatic Resources Delineation Map**).

Table 1: Aquatic Resources within the Survey Area

Site Coordinates (decimal degrees)	Aquatic Resource	Cowardin*	Aquatic Resource Size (acre)	Aquatic Resource Size (linear feet)
35.813245 N -118.845433 W	White River (WR)	R4SBC	0.18	820
35.813190 N -118.845567 W	Seasonal Wetland 1 (SW-1)	PEM1C	0.01	90
35.813238 N -118.845611 W	Seasonal Wetland 2 (SW-2)	PEM1C	<0.01	45
		Total	**0.19**	**955**

**Cowardin et.al. 1979*

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Appendix A – Aquatic Resources Delineation Map

V:\2599 M019 White River\Permits\ARDR_2020-11-19.mxd

Coordinate System: NAD 1983 UTM Zone 10
Projection: Tranverse Mercator
Datum: North American 1983

1 inch = 30 feet

0 10 20 30 40 50 Feet

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Delineator: Andrew Dellas
Deliniation Date: April 1, Apirl 23, May 14, November 6, 2020
Aerial Photography Source: Dokken Engineering 2020

This delination of water of the United States is subject to verification by the U.S. Army Corps of Engineers (Corps). Dokken Engineering advies all parties that the delineation is preliminary until the Corps provides a written verification.

Aquatic Resources Delineation Map

BRLS-5946(170)
M109 over White River Bridge Replacement Project
White River, Tulare County, California

Appendix B - Supporting Resources

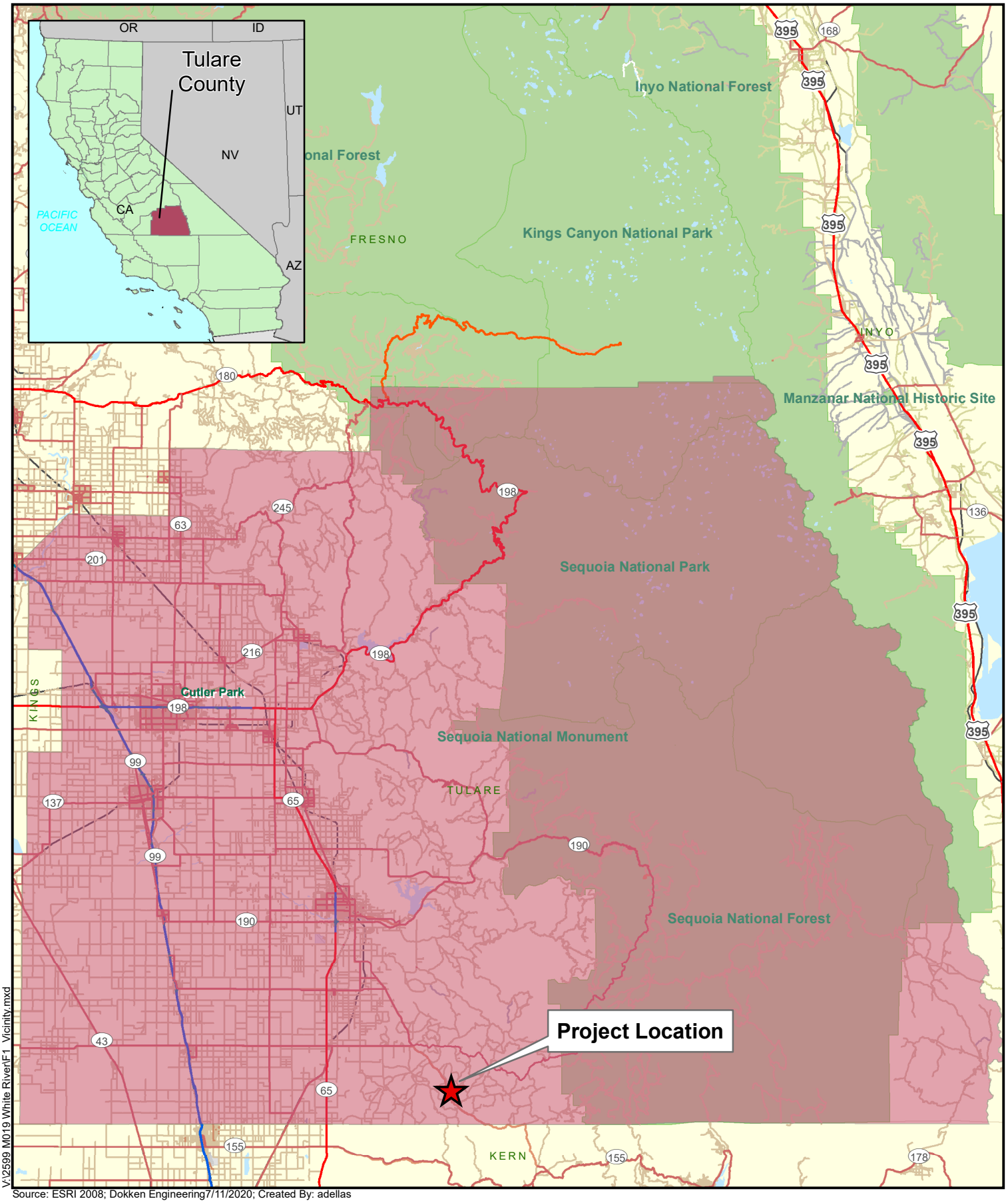
Vicinity Map

Location Map

Project Features Map

Vegetation Communities within the BSA

NRCS Web Soil Survey Report

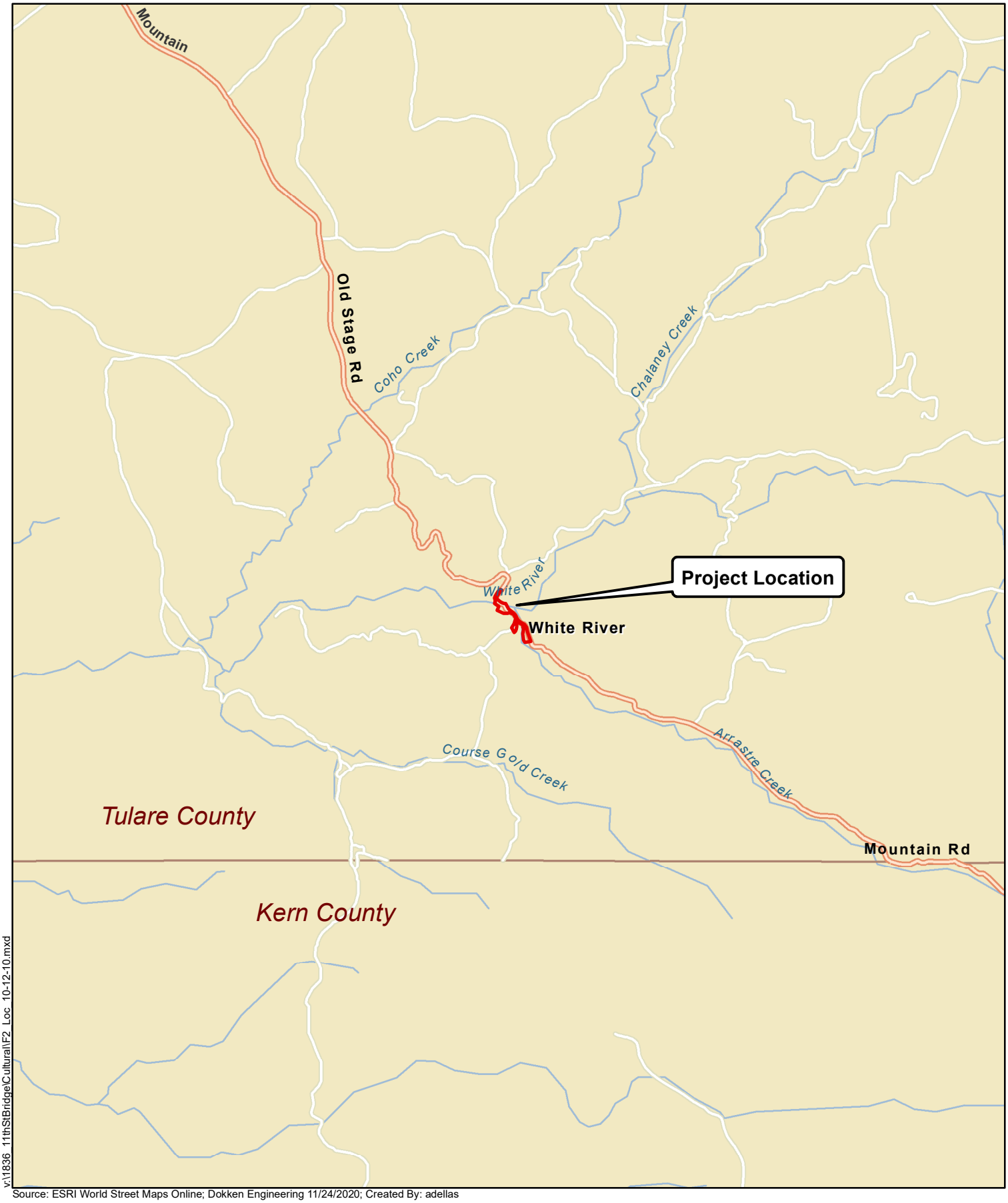


V:\2599 M019 White River\F1 Vicinity.mxd

Source: ESRI 2008; Dokken Engineering7/11/2020; Created By: adellas

0 5 10 15 Miles

FIGURE 1
Project Vicinity
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California



v:\1836_11thStBridge\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 11/24/2020; Created By: adellas

0 0.5 1 1.5 2 Miles

FIGURE 2
Project Location
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California

V:\2599 M019 White River\F3_ProjectFeatures_2020-11-25.mxd

Source: ESRI Maps Online; Dokken Engineering 11/25/2020; Created By: adellas

1 inch = 125 feet

0 130 260 390 520 Feet

Figure 3. Project Features

BRLS-5946(170)

M109 over White River Bridge Replacement Project

White River, Tulare County, California

Figure 4. Waters and Vegetation Communities within the Project Area

BRLS-5946(170)
M109 over White River Bridge Replacement Project
White River, Tulare County, California

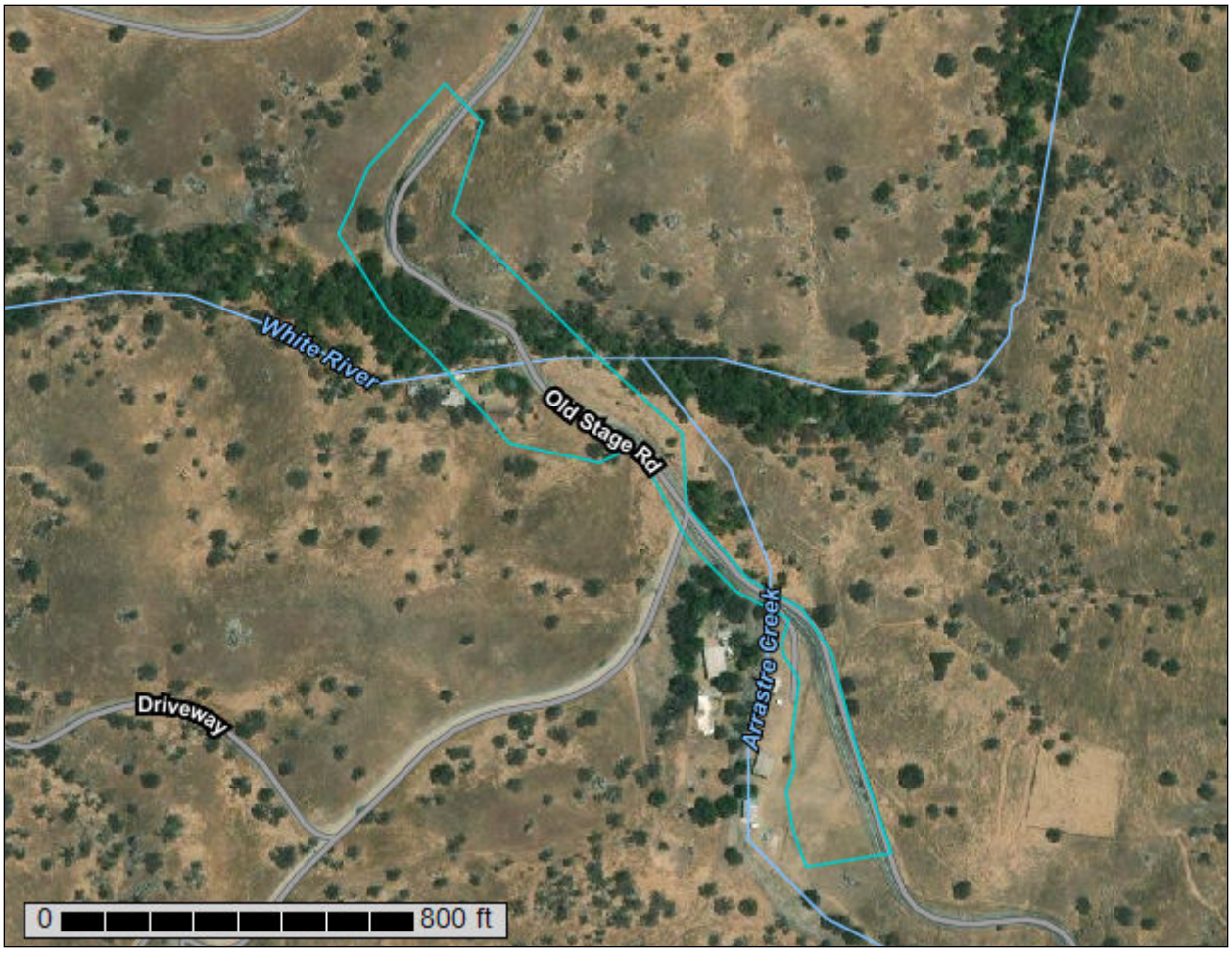
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Tulare County, California, Central Part



November 3, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:3,160 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 45 90 180 270

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Tulare County, California, Central Part
Survey Area Data: Version 14, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 15, 2016—Nov 5, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106	Blasingame sandy loam, 15 to 30 percent slopes	2.0	24.3%
107	Blasingame sandy loam, 30 to 50 percent slopes	4.6	57.1%
116	Cieneba-Rock outcrop complex, 15 to 75 percent slopes	1.5	18.6%
Totals for Area of Interest		**8.1**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Tulare County, California, Central Part

106—Blasingame sandy loam, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: hkcx
Elevation: 500 to 3,500 feet
Mean annual precipitation: 12 to 32 inches
Mean annual air temperature: 55 to 62 degrees F
Frost-free period: 150 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition

Blasingame and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blasingame

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Quartz residuum weathered from diorite

Typical profile

A - 0 to 7 inches: sandy loam
Bt - 7 to 36 inches: sandy clay loam, clay loam, loam
Bt - 7 to 36 inches: bedrock
Bt - 7 to 36 inches:
Cr - 36 to 60 inches:

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very high (about 14.6 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: R018XE003CA - Coarse Loamy
Hydric soil rating: No

Minor Components

Fallbrook
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Auberry
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Cieneba
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Vista
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Unnamed, finer subsoil
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Unnamed, bouldery
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

107—Blasingame sandy loam, 30 to 50 percent slopes

Map Unit Setting
National map unit symbol: hkcy
Elevation: 400 to 4,500 feet
Mean annual precipitation: 9 to 25 inches
Mean annual air temperature: 57 to 66 degrees F
Frost-free period: 150 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition
Blasingame and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blasingame

Setting
Landform: Hills

Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from quartz-diorite

Typical profile

A - 0 to 7 inches: sandy loam
Bt - 7 to 36 inches: sandy clay loam, clay loam, loam
Bt - 7 to 36 inches:
Bt - 7 to 36 inches:

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very high (about 14.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: R018XE003CA - Coarse Loamy
Hydric soil rating: No

Minor Components

Auberry

Percent of map unit: 4 percent
Hydric soil rating: No

Cieneba

Percent of map unit: 4 percent
Hydric soil rating: No

Fallbrook

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed, finer subsoil

Percent of map unit: 4 percent
Hydric soil rating: No

Vista

Percent of map unit: 4 percent
Hydric soil rating: No

116—Cieneba-Rock outcrop complex, 15 to 75 percent slopes

Map Unit Setting

National map unit symbol: hkd7
Elevation: 500 to 4,000 feet
Mean annual precipitation: 12 to 35 inches
Mean annual air temperature: 57 to 64 degrees F
Frost-free period: 200 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Cieneba and similar soils: 55 percent
Rock outcrop: 30 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cieneba

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Concave
Across-slope shape: Convex, concave
Parent material: Residuum weathered from granitoid

Typical profile

A - 0 to 16 inches: coarse sandy loam
Cr - 16 to 60 inches: weathered bedrock

Properties and qualities

Slope: 15 to 75 percent
Depth to restrictive feature: 10 to 20 inches to paralithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R018XE029CA - SHALLOW COARSE LOAMY
Hydric soil rating: No

Description of Rock Outcrop

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8e
Hydric soil rating: No

Minor Components

Unnamed, dark color

Percent of map unit: 4 percent
Hydric soil rating: No

Vista

Percent of map unit: 4 percent
Hydric soil rating: No

Blasingame

Percent of map unit: 4 percent
Hydric soil rating: No

Walong

Percent of map unit: 3 percent
Hydric soil rating: No

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Appendix C – Representative Photographs

Representative Photograph 1. View of White River Channel and SW-1 in foreground, facing north.

Representative Photograph 2. View of SW-1 with White River in foreground, facing south.

Representative Photograph 3. View of White River channel and bench east (up-stream) of the M109 Bridge, facing east.

Representative Photograph 4. View of White River channel east (up-stream) of the M109 Bridge, facing northeast.

Appendix D – Plant Species Observed

PLANT SPECIES OBSERVED

The table below includes a list of plant species observed within the BSAs during biological field surveys. No special-status plant species were observed.

Plant Species Observed within the BSA

Common Name	Scientific Name	Native (N) / Non-native (X)
Ferns		
Goldback fern	*Pentagramma triangularis*	N
Grasses		
Compact brome	*Bromus madrintensis*	X
Foxtail barley	*Hordeum murinum*	X – [moderate]
Ripgut brome	*Bromus diandrus*	X – [moderate]
Soft chess brome	*Bromus hordeaceus*	X – [limited]
Herbs		
Bedstraw	*Galium sp.*	N
Blue water-speedwell	*Veronica anagallis-aquatica*	X
Bristly fiddleneck	*Amsinckia tessellata*	N
California goosefoot	*Chenopodium californicum*	N
California mugwort	*Artemisia douglasiana*	N
Caterpillar scorpionweed	*Phacelia cicutaria*	N
Chick lupine	*Lupinus microcarpus*	N
Common chickweed	*Stellaria media*	X
Curly dock	*Rumex crispus*	X – [limited]
Cutleaf gernanium	*Geranium dissectum*	X – [limited]
Deerweed	*Acmispon glaber*	N
Fiesta flower	*Pholistoma auritum*	N
Jimsonweed	*Datura wrightii*	N
Milk thistle	*Silybum marianum*	X – [limited]
Miner’s lettuce	*Claytonia parviflora*	N
Queen Anne’s lace	*Daucus carota*	X
Red stem filaree	*Erodium cicutarium*	X – [limited]
Rough cocklebur	*Xanthium strumarium*	N
Rusty popcornflower	*Plagiobothrys nothofulvus*	N
Sky lupine	*Lupinus nanus*	N
Spearmint	*Mentha spicata*	X
Spike rush	*Eleocharis sp.*	N
Stinging nettle	*Urtica dioica*	N
Sweetclover	*Melilotus sp.*	X
Tumble mustard	*Sisymbrium altissimum*	X
Water smartweed	*Persicaria amphibia*	N
Shrubs		
Azalea	*Rhododendron sp.*	N
Elderberry	*Sambucus sp.*	N
Mule fat	*Baccharis salicifolia*	N
Silver bush lupine	*Lupinus albifrons*	N
Trees		
California buckeye	*Aesculus californica*	N
California sycamore	*Platanus racemosa*	N
Fig	*Ficus sp.*	X

Gooding's willow	*Salix gooddingii*	N
Interior live oak	*Quercus wislizeni*	N
Red willow	*Salix laevigata*	N
Tree of heaven	*Ailanthus altissima*	X – [moderate]
Valley oak	*Quercus lobata*	N

Appendix E – Delineation Data Sheets

OHWM Data Sheets

Wetland Delineation Datasheets

IN

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: M109 Bridge Replacement City/County: White River, Tulare Sampling Date: 5/14/20
Applicant/Owner: Tulare County RMA State: CA Sampling Point: SP-1A
Investigator(s): Andrew Dellas Section, Township, Range: S28, T24S, R29E
Landform (hillslope, terrace, etc.): Low terrace Local relief (concave, convex, none): concave Slope (%): 0-2
Subregion (LRR): LRR C Lat: 35.813190 Long: -118.845567 Datum: GPS
Soil Map Unit Name: Blasingame sandy loam, 30 to 50% slopes NWI classification: PSSA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ✓ No ____
Hydric Soil Present? Yes ✓ No ____
Wetland Hydrology Present? Yes ✓ No ____
Is the Sampled Area within a Wetland? Yes ✓ No ____

Remarks:
Area just above ottwm indicators, low pocket-like terrace.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Ailanthus altissima	3		FACU
2.			
3.			
4.			
	3	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	Ø	= Total Cover	
Herb Stratum (Plot size: 5 ft.)			
1. Melilotus officinalis	20	✓	FACU
2. Artemisia douglasiana	15	✓	FAC
3. Mimulus guttatus	15	✓	OBL
4. Veronica anagallis-aquatica	5		OBL
5. Stachys albens	15	✓	OBL
6. Bromus ciliatus	2		FAC
7. Lolium perene	1		FAC
8. Mentha arvensis	1		FACW
	74	= Total Cover	
Woody Vine Stratum (Plot size: 10 ft.)			
1.			
2.			
	Ø	= Total Cover	

% Bare Ground in Herb Stratum 23 % Cover of Biotic Crust Ø

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 3/4 = 75% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
✓ Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

Sampling Point: _____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 3/2	100						
1-2	2.5YR 4/1	100						
2-6	10YR 2/2	97	2.5YR 3/6	3	C	M	LS	
6-16	10YR 2/1	95	2.5YR 3/3	5	C	M	LS	Black w/ dark concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ✓ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ✓ Sediment Deposits (B2) (**Nonriverine**)
- ✓ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): _____

Water Table Present? Yes ✓ No ___ Depth (inches): ≈ 15-16"

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): ≈ 14-16"

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

OUT

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: M109 Bridge Replacement City/County: White River, Tulare Sampling Date: 5/14/20
Applicant/Owner: Tulare County RMA State: CA Sampling Point: SP-113
Investigator(s): Andrew Dellas Section, Township, Range: S23, T24S, R29E
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): convex Slope (%): 0-2
Subregion (LRR): LRR C Lat: 35.813190 Long: -119.845567 Datum: GPS
Soil Map Unit Name: Blasingame sandy loam, 30 to 50% slopes NWI classification: —
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Ailanthus altissima	3		FACU
2.			
3.			
4.			
	3	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	Ø	= Total Cover	
Herb Stratum (Plot size: 5 ft.)			
1. Conium maculatum	15	✓	FACW
2. Artemisia douglasiana	20	✓	FAC
3. Bromus diandrus	15	✓	UPL
4. Carduus pycnocephalus	5		UPL
5. Lolium perenne	5		FAC
6. Urtica dioica	20	✓	FAC
7.			
8.			
		= Total Cover	
Woody Vine Stratum (Plot size: 10 ft.)			
1.			
2.			
	Ø	= Total Cover	

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust Ø

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 3/4 = 75% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
✓ Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

Sampling Point: _____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 5/1	100					S	
3-12	2.5Y 3/2	100					LS	
12-16	2.5Y 5/3	100					S	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

OUT

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: M109 Bridge Replacement City/County: White River, Tulare Sampling Date: 5/14/20
Applicant/Owner: Tulare County RMA State: CA Sampling Point: SP-2A
Investigator(s): Andrew Dellas Section, Township, Range: S28, T24S, R29E
Landform (hillslope, terrace, etc.): Terrace/Bench Local relief (concave, convex, none): _____ Slope (%): 0-2
Subregion (LRR): LRR C Lat: _____ Long: _____ Datum: GPS
Soil Map Unit Name: Blasingame sandy loam, 30 to 50 % slopes NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Ailanthus altissima	5		FACU
2.			
3.			
4.			
	5	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	Ø	= Total Cover	

Herb Stratum (Plot size: 5 ft.)			
1. Rumex crispus	5		FAC
2. Melilotus officinalis	15	✓	FACU
3. Carduus pycnocephalus	10	✓	UPL
4. Bromus diandrus	10	✓	UPL
5. Hordeum murinum	10	✓	UPL
6. Cynodum dactylon	15	✓	FACU
7. Medicago polymorpha	5		FACU
8. Sonchus arvensis	5		FACU
	75	= Total Cover	

Woody Vine Stratum (Plot size: 10 ft.)			
1.			
2.			
	Ø	= Total Cover	

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust Ø

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species 0	x 1 =	0
FACW species 0	x 2 =	0
FAC species 5	x 3 =	15
FACU species 45	x 4 =	180
UPL species 30	x 5 =	150
Column Totals: 80 (A)		345 (B)

Prevalence Index = B/A = 4.31

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

Sampling Point: _____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 5/1	100					S	
3-5	10YR 3/2	100					LS	
5-10	10YR 2/1	98	2.5YR 3/4	2	C	M	LS	Black w/ Redox
10-11	10YR 5/1	100					S	
11-16	10YR 2/1	98	2.5YR 3/4	2	C	M	LS	Black w/ Redox

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ✓ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): _____

Wetland Hydrology Present? Yes ___ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: M109 Bridge Replacement
Project Number: 2599
Stream: White River
Investigator(s): Andrew Dellas

Date: 5/14/20
Town: White River
Time: 2:15 PM
State: CA
Photo begin file#:
Photo end file#:

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☑ Is the site significantly disturbed?

Location Details:

Projection: State Plane IV
Datum: GPS
Coordinates: 35.813190, -118.845364

Potential anthropogenic influences on the channel system:
Bridge M109 may constrict channel at north face.

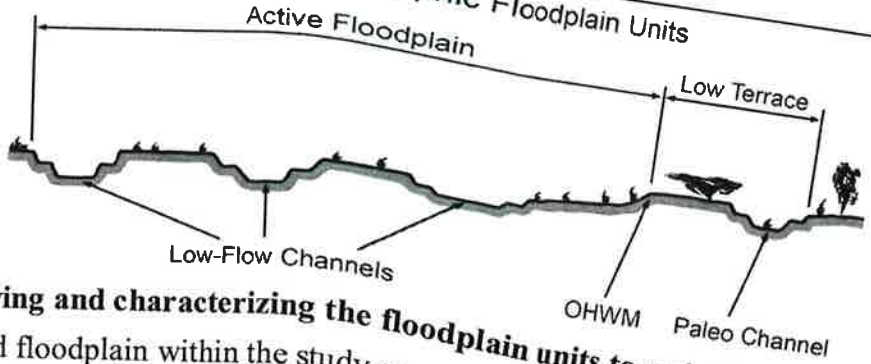
Brief site description:
Slow-flowing White River intermittent channel. Cut banks on higher ground to so
0-2% slope to north.

Checklist of resources (if available):

- ☒ Aerial photography
  Dates: 2016
- ☐ Topographic maps
- ☐ Geologic maps
- ☐ Vegetation maps
- ☒ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☒ Global positioning system (GPS)
- ☐ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
  - ☐ History of recent effective discharges
  - ☐ Results of flood frequency analysis
  - ☐ Most recent shift-adjusted rating
  - ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

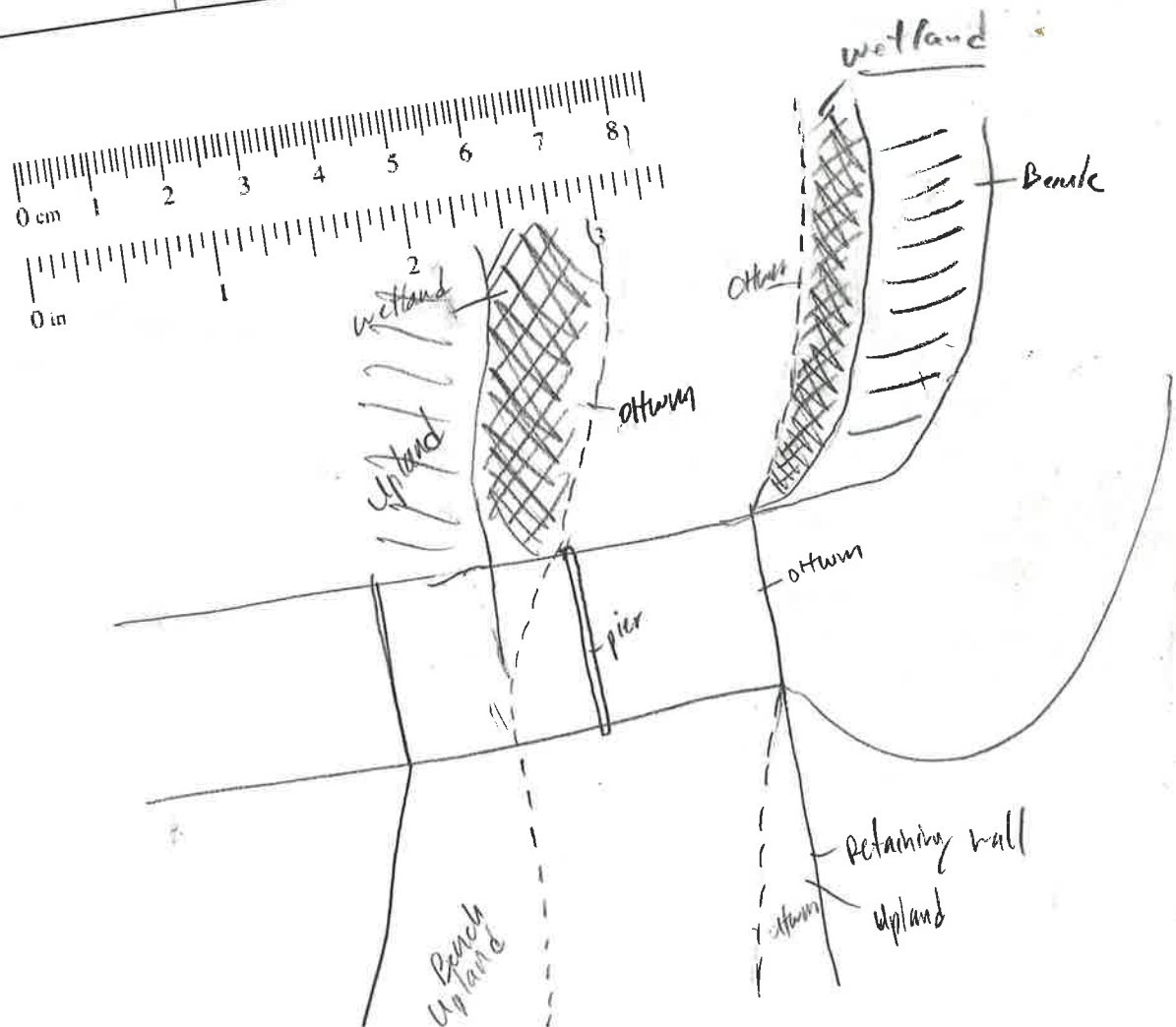


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☒ Mapping on aerial photograph
   - ☒ Digitized on computer
   - ☑ GPS
   - ☐ Other:

Wentworth Size Classes

Inches (in)	Millimeters (mm)	Wentworth size class	
10.08	256	Boulder	Gravel
2.56	64	Cobble	Gravel
0.157	4	Pebble	Gravel
0.079	2.00	Granule	Gravel
0.039	1.00	Very coarse sand	Sand
0.020	0.50	Coarse sand	Sand
1/2 0.0098	0.25	Medium sand	Sand
1/4 0.005	0.125	Fine sand	Sand
1/8 0.0025	0.0625	Very fine sand	Sand
1/16 0.0012	0.031	Coarse silt	Silt
1/32 0.00061	0.0156	Medium silt	Silt
1/64 0.00031	0.0078	Fine silt	Silt
1/128 0.00015	0.0039	Very fine silt	Silt
		Clay	Mud



Project ID: **Cross section ID:** **Date:** **Time:**

Cross section drawing:

OHWM

GPS point: OHWM 1

Indicators:

- [x] Change in average sediment texture
- [x] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:

Break in bank slope at southside.
Diagonal flow under bridge OHWM against north bridge abutment.

Floodplain unit:

- [ ] Low-Flow Channel
- [x] Active Floodplain
- [ ] Low Terrace

GPS point: OHWM 1

Characteristics of the floodplain unit:

Average sediment texture: Fine sand

Total veg cover: 70 % Tree: 10 % Shrub: X % Herb: 60 %

Community successional stage:

- [ ] NA
- [x] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [x] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [x] Drift and/or debris
- [x] Presence of bed and bank
- [x] Benches
- [x] Soil development
- [ ] Surface relief
- [x] Other: Break in bank slope.
- [ ] Other: _____
- [ ] Other: _____

Comments:

Approximately 10% veg 90% bare ground below OHWM.
Approximately 70% veg cover above OHWM.
Distinct break in bank slope to bench on south side with distinct change in veg cover and species on north side.

Project ID: **Cross section ID:** **Date:** **Time:**

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Appendix F. NRCS Soil Resource Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Tulare County, California, Central Part

M109 White River

May 13, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,890 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Tulare County, California, Central Part
Survey Area Data: Version 13, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 15, 2016—Nov 5, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106	Blasingame sandy loam, 15 to 30 percent slopes	0.0	0.4%
107	Blasingame sandy loam, 30 to 50 percent slopes	5.3	77.4%
116	Cieneba-Rock outcrop complex, 15 to 75 percent slopes	1.5	22.2%
Totals for Area of Interest		**6.8**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Tulare County, California, Central Part

106—Blasingame sandy loam, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: hkcx
Elevation: 500 to 3,500 feet
Mean annual precipitation: 12 to 32 inches
Mean annual air temperature: 55 to 62 degrees F
Frost-free period: 150 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition

Blasingame and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blasingame

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Quartz residuum weathered from diorite

Typical profile

A - 0 to 7 inches: sandy loam
Bt - 7 to 36 inches: sandy clay loam, clay loam, loam
Bt - 7 to 36 inches: bedrock
Bt - 7 to 36 inches:
Cr - 36 to 60 inches:

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very high (about 14.6 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: Coarse Loamy (R018XE003CA)
Hydric soil rating: No

Minor Components

Cieneba
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Fallbrook
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Vista
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Auberry
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Unnamed, finer subsoil
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Unnamed, bouldery
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

107—Blasingame sandy loam, 30 to 50 percent slopes

Map Unit Setting
National map unit symbol: hkcy
Elevation: 400 to 4,500 feet
Mean annual precipitation: 9 to 25 inches
Mean annual air temperature: 57 to 66 degrees F
Frost-free period: 150 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition
Blasingame and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blasingame

Setting
Landform: Hills

Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from quartz-diorite

Typical profile

A - 0 to 7 inches: sandy loam
Bt - 7 to 36 inches: sandy clay loam, clay loam, loam
Bt - 7 to 36 inches:
Bt - 7 to 36 inches:

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very high (about 14.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: Coarse Loamy (R018XE003CA)
Hydric soil rating: No

Minor Components

Fallbrook

Percent of map unit: 4 percent
Hydric soil rating: No

Auberry

Percent of map unit: 4 percent
Hydric soil rating: No

Vista

Percent of map unit: 4 percent
Hydric soil rating: No

Cieneba

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed, finer subsoil

Percent of map unit: 4 percent
Hydric soil rating: No

116—Cieneba-Rock outcrop complex, 15 to 75 percent slopes

Map Unit Setting

National map unit symbol: hkd7
Elevation: 500 to 4,000 feet
Mean annual precipitation: 12 to 35 inches
Mean annual air temperature: 57 to 64 degrees F
Frost-free period: 200 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Cieneba and similar soils: 55 percent
Rock outcrop: 30 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cieneba

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Concave
Across-slope shape: Convex, concave
Parent material: Residuum weathered from granitoid

Typical profile

A - 0 to 16 inches: coarse sandy loam
Cr - 16 to 60 inches: weathered bedrock

Properties and qualities

Slope: 15 to 75 percent
Depth to restrictive feature: 10 to 20 inches to paralithic bedrock
Natural drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: SHALLOW COARSE LOAMY (R018XE029CA)
Hydric soil rating: No

Description of Rock Outcrop

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8e
Hydric soil rating: No

Minor Components

Blasingame

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed, dark color

Percent of map unit: 4 percent
Hydric soil rating: No

Vista

Percent of map unit: 4 percent
Hydric soil rating: No

Walong

Percent of map unit: 3 percent
Hydric soil rating: No

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Appendix G. Representative Photographs

Representative Photograph 1. View of White River channel and seasonal wetland in foreground, facing north.

Representative Photograph 2. View of riparian corridor and annual grassland in foreground, facing north.

Representative Photograph 3. View of residential property and annual grassland in foreground, facing southeast.

Representative Photograph 4. View of riparian corridor, annual grassland, and urban/barren land in foreground. View from residential property facing northwest.

Attachment "C"

Historic Property Survey Report

Consultation Tracking Table

Consultation Letters & Follow Up Emails

HISTORIC PROPERTY SURVEY REPORT

1. UNDERTAKING DESCRIPTION AND LOCATION

District	*County*	*Federal Project. Number. (Prefix, Agency Code, Project No.)*	*Location*
6	Tulare	BRLS-5946(170)	35103 Mt. Rd. 109

The studies for this undertaking were carried out in a manner consistent with Caltrans' regulatory responsibilities under Section 106 of the National Historic Preservation Act (36 CFR Part 800) and pursuant to the January 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act* (Section 106 PA).

Project Description:

The County of Tulare (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations in the facility.

The bridge is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California. The existing bridge was constructed in 1939 and is not eligible for the National Register of Historic Places. The structure is a two span steel girder with timber deck and asphalt over bridge structure supported on spread footings. The bridge measures approximately 40 feet in total length with a total width of 16 feet and clear width between railing of 11 feet.

The bridge is predominantly used by local resident's vehicles and agricultural-related equipment and the roadway narrows to one lane of un-signalized bi-directional traffic over the bridge. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 (out of a potential 100 rating) and was flagged structurally deficient due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads.

Temporary construction easements are needed throughout the project area and construction staging would take place within County right-of-way and adjacent privately owned parcels. Minor permanent right-of-way acquisitions are anticipated.

The total estimated cost to implement the Build Alternative is approximately $2.1 million. The project is included in the Fiscal Years 2019 Federal Transportation Improvement Program (FTIP) and is funded through the 2016/17 – 2021/22 Federal Highway Bridge Program (HBP).

The purpose of the Project is to:

- Replace the existing M109 over White River Bridge with a new two-lane bridge
- Provide a structure that meets current design standards
- Provide improved safety and operations on the facility
- Provide improved access for local use of agricultural equipment

The Project is needed because the existing bridge has a sufficiency rating of 4.5 and was flagged structurally deficient due to the bridge's low load carrying capacity. The existing bridge is narrow and only capable of carrying 1 lane of traffic.

The Project is subject to both CEQA and NEPA processes. The County is the lead agency under CEQA and Caltrans is the lead agency under NEPA.

Build Alternative
The Build Alternative would replace the existing M109 bridge crossing over White River with a new two-lane bridge structure to match the required minimum width to carry two lanes of traffic. The approximate limits of the project are approximately 500 feet northwest and 300 feet southeast of the existing M109 crossing of White River. The Project would conform to the existing roadway width and would provide an improved road alignment for safety. The bridge structure would consist of a concrete slab bridge. The proposed bridge would be approximately 100 feet long and would be no greater than 18 feet in height when measured from the creek bottom.

The White River channel would be graded to restore natural channel contours. Rock slope protection may be necessary around the bridge abutments for scour protection.

Temporary construction easements would be needed for bridge construction and construction staging areas. Permanent slope easements may be required to conform the finished grades of the maintenance roads along each side of the creek to the bridge profile grade. Right-of-way acquisition and utility relocations are anticipated.

M109 and driveway access would remain open during construction. Due to the length of a potential detour route, stage construction would be utilized in order to keep the roadway open to traffic during construction. Construction is anticipated to begin in 2024 and would take approximately 12 months to complete.

No-Build Alternative
The No-Build Alternative would result in no modifications to the M109 over White River Bridge. As such, the existing bridge at M109 over White River Road would remain both functionally obsolete and structurally deficient as noted earlier.

2. AREA OF POTENTIAL EFFECTS

In accordance with Section 106 PA Stipulation VIII.A, the Area of Potential Effects (APE) for the Project was established in consultation with John Whitehouse – PQS Principal Investigator in Prehistoric and Historical Archaeology, and James Perrault, Local Assistance Engineer, on [date once signed]. The APE maps are located in **Attachment 1** as **Figure 3** of this HPSR.

The APE was established as an approximate seven acre area encompassing the White River Bridge (Bridge No. 46C-0133). The APE includes all areas that will be directly and indirectly impacted by the proposed Project activities, which consist of vegetation clearing/grubbing, grading, bridge replacement, approach roadway realignment, realignment of White River channel, potential staging areas; construction vehicle access; cut/fill limits, placement of rock slope protection, right-of-way acquisition, permanent slope easements, and temporary construction easements. An Area of Direct Impact (ADI) has also been delineated within the APE to demarcate the areas that will only be subject to direct ground disturbance. The APE is generally limited to the ROW of the M109 roadway but does include some staging areas on private property. The entire Project APE totals approximately 7 acres in size while the ADI totals approximately 5 acres in size (**Attachment 1**).

The vertical APE extends approximately 15-feet below grade in areas immediately surrounding the proposed bridge, and as shallow as 6 inches or less in association with proposed grading activity adjacent to the bridge location and/or along portion of M109. The proposed staging areas should have less than 6 inches of ground disturbance from the movement of heavy machinery.

3. CONSULTING PARTIES / PUBLIC PARTICIPATION

☒ Native American Heritage Commission

On April 16, 2019, the NAHC was requested to review the Sacred Lands Files (SLF) for any Native American cultural resources that might be affected by the project. A follow-up email was sent on June 16, 2020. (**ASR Appendix B,** located in **Attachment 2** of this HPSR).

☒ Native American Tribes, Groups and Individuals

On June 18, 2020, initial consultation letters were mailed to the Native American individuals on the list provided by the NAHC. The letters provided a summary of the project and requested information regarding comments or concerns the Native American community might have about the project (**ASR Appendix B** located in **Attachment 2** of this HPSR). For those individuals who did not respond to the letter, a telephone call was placed on July 28, 2020. Those who could not be reached by telephone were e-mailed a copy of the original notification letter on July 29, 2020. The following individuals were contacted:

- *Kern Valley Indian Community, Robert Robinson, Co-Chairperson*. To date, no response to the initial notification letter or follow-up email has been received.
- *Kern Valley Indian Community, Julie Turner, Secretary*. To date, no response to the initial notification letter or follow-up email has been received.
- *Kern Valley Indian Community, Brandy Kendricks.* To date, no response to the initial notification letter or follow-up email has been received.
- *Santa Rosa Rancheria Tachi Yokut Tribe, Leo Sisco, Chairperson.* Chairperson Sisco's operator service was reached via telephone on July 28, 2020 who took a message for Chairperson Sisco.
- *Santa Rosa Rancheria Tachi Yokut Tribe, Robert Jeff, Vice-Chair.* Vice-Chair Jeff's operator service was reached via telephone on July 28, 2020 who took a message for Vice-Chair Jeff.
- *Santa Rosa Rancheria Tachi Yokut Tribe, Bianca Arias, Administrative Assistant.* Administrative Assistant Arias' operator service was reached via telephone on July 28, 2020 who took a message for Administrative Assistant Arias.
- *Santa Rosa Rancheria, Cultural Department, Shana Powers, Director.* Director Powers's operator service was reached via telephone on July 28, 2020 who took a message for Director Powers. n August 8, 2020 Director Powers provided email correspondence deferring consultation to the Tejon and Tule River Indian Tribes.
- *Santa Rosa Rancheria Tachi Yokut Tribe, Cultural Department, Greg Cuara, Cultural Specialist.* Cultural Specialist Cuara's operator service was reached via telephone on July 28, 2020 who took a message for Cultural Specialist Cuara.

- *Tubatulabais of Kern Valley, Robert L. Gomez, Jr., Chairperson.* No response to the initial notification letter date has been received. as the certified mail delivery receipt noted as "unclaimed" and "unable to forward". No response to the follow-up email has been received to date.
- *Tule River Indian Tribe, Neil Peyron, Chairperson.* Reached via telephone on July 28, 2020, Neil Peyron indicated he would need to check with his EPA office. No further response has been received to date. As contact has been made with Director Vera, no further outreach to Chairperson Peyron will occur.
- *Tule River Indian Tribe, Environmental Department, Kerri Vera, Director.* Dokken Archaeologist Amy Dunay and the County conducted a field meeting and partial survey of the APE around the proposed location for the bridge replacement and roadway realignment with Director Vera on December 7, 2020. No cultural resources were identified within the APE; however, some resources were noted outside the APE. Director Vera recommended no grading with the proposed staging area located on the narrow shoulder southeast of the bridge. A copy of the geotechnical report was requested by Director Vera, which will be provided once it becomes available. After review of the geotechnical report, Director Vera will provide the County with the Tule River Indian Tribe's recommendations, which may include a recommendation for Native American monitoring during initial ground disturbing activities.
- *Tule River Indian Tribe, Department of Environmental Protection, Felix Christman, Archaeological Monitor.* To date, no response to the initial notification letter or follow-up email has been received.
- *Wuksache Indian Tribe / Eshom Valley Band, Kenneth Woodrow, Chairperson.* To date, no response to the initial notification letter or follow-up email has been received.

4. SUMMARY OF IDENTIFICATION EFFORTS

☒ National Register of Historic Places (NRHP)

☒ California Register of Historical Resources (CRHR)

☒ National Historic Landmark (NHL)

☒ California Historical Landmarks (CHL)

☒ Other Sources consulted:

☒ California Points of Historical Interest

☒ California Historical Resources Information System (CHRIS)

☒ Caltrans Historic Bridge Inventory

☒ **Record Search:** A record search for the APE and a one-mile radius surrounding the APE was requested from the Southern San Joaquin Valley Information Center (SSJVIC), California State University, Bakersfield on April 16, 2019. The search examined the OHP Historic Properties Directory, OHP Determinations of Eligibility, and

California Inventory of Historical Resources. The SJVIC results are included in **ASR Appendix A** of **HPSR Attachment 2**.

- The record search revealed one documented resource and one unrecorded resource within the one-mile record search radius, but no resources within the project APE. The Tailholt site is located just to the southeast of the APE, along the M109 road. The unrecorded resource is a bedrock mortar located northwest of the APE.
- Three prior cultural resource inventories have occurred within parts of the current APE. One of the inventories was a survey of M109 that was conducted in 1981 (TU-00268). The bridge area was inventoried in 1979 (TU-00287). And the final inventory that was conducted in the APE was in 2005 and was a small area encompassed for a pole replacement (TU-01271). Including these three efforts, four cultural resource inventories have been previously conducted within the one-mile search radius.

Survey Results: An archaeological field survey of the APE was conducted on September 30, 2020 and December 7, 2020. The pedestrian survey was conducted at roughly 5-meter transect intervals. Visibility varied in areas with vegetation coverage. Based on the results of the background research and the evidence of both historic and prehistoric use in the area, survey efforts included trying to locate cellars, privies, refuse pits, cairns, etc. Any area that was flat, had depressions or large bedrocks was inspected closely in an attempt to locate cultural resources. No cultural resources were identified within the APE.

5. PROPERTIES IDENTIFIED

☒ Bridges listed as **Category 5** (previously determined not eligible for listing in the NRHP) in the Caltrans Historic Bridge Inventory are present within the APE and those determinations remain valid. Appropriate pages from the Caltrans Historic Bridge Inventory are attached.

- White River Bridge over White River (Bridge No. 46C0133).

☒ Caltrans has determined there are cultural resources within the APE that were evaluated as a result of this project and are **not eligible** for inclusion in the NRHP. Under Section 106 PA Stipulation VIII.C.6, Caltrans requests SHPO's concurrence in this determination.

-**(Primary Number Pending) Map Reference #1 Old Stage Road** (Tulare County Road M109) begins in the south at County Road M3, also called the White River Road. It continues to the north for about 20 miles, where it ends at a three-way intersection with County Road 264 and Avenue 108, northeast of Terra Bella. The road is approximately 40 miles long and county records indicate the road is classified as a "Rural Major Collector." The roadway itself is a modern two-lane paved highway with a light traffic count.

-**(Primary Number Pending) Map Reference #2 The Hutton House** (APN 344-030-05) is a small cottage of about 1000 square feet, situated on a parcel of about one acre, adjoining the White River on the Old Stage Road.

6. FINDING FOR THE UNDERTAKING

☒ Caltrans, pursuant to Section 106 PA Stipulation IX.A, has determined a Finding of **No Historic Properties Affected** is appropriate for this undertaking because there are no historic properties within the APE.

7. CEQA CONSIDERATIONS

☒ Not applicable; **Caltrans is not the lead agency under CEQA.**

8. LIST OF ATTACHED DOCUMENTATION

☒ Project Vicinity, Location, and APE Maps
-Attachment 1

☒ Caltrans Historic Bridge Inventory Sheet
-Attachment 4

☒ Historical Resources Evaluation Report (HRER)
-Attachment 3

☒ Archaeological Survey Report (ASR)
-Attachment 2

☒ Other:
SSJVIC Record Search Results
-ASR Appendix A (HPSR Attachment 2)

Native American Consultation
-ASR Appendix B (HPSR Attachment 2)

Newly Recorded Sites (Primary Numbers pending)
-HRER Attachment 2 (HPSR Attachment 3)

9. HPSR PREPARATION AND CALTRANS APPROVAL

Prepared by:

Robin M. Roberts Date
Environmental Planner/Archaeologist
PQS Equivalent: Co-principal Investigator in Prehistoric and Historical Archaeology
Dokken Engineering
110 Blue Ravine Road, Suite 200
Folsom, CA 95630

Reviewed for
Approval by: _____

District 6 Caltrans PQS — John Whitehouse, Principal Investigator in Prehistoric and Historical Archaeology — Date

Approval by: _____

District 6 EBC — Shane Gunn, Environmental Branch Chief — Date

Consultation Notice – ROAD M109 WHITE RIVER BRIDGE REPLACEMENT (CEQA + SEC.106)														
TRIBE CONTACTED	**REQUEST TYPE**			**ITEMS & DOCUMENTS SUBMITTED**					**DELIVERY METHOD**			**CONSULTATION PERIOD (CEQA)**		**CONSULTATION / ACTIONS**
	AB 52	**SB 18**	**Sec 106**	**Map**	**Project Description**	**SLF Search Results**	**CHRIS Results**	**Other**	**E-mail**	**FedEx**	**Certified US Mail**	**Return Receipt**	**Period Ends**	**Summary**
SACRED LAND FILE (SLF) REQUEST														
Native American Heritage Commission NAHC@nahc.ca.gov	X		X	X	X				6/16/20					6/17/20, NAHC responded indicating "negative" results and providing list of tribal representatives.
CONSULTATION REQUEST LETTERS														
Kern Valley Indian Community Robert Robinson, Co-Chairperson P.O. Box 1010 Lake Isabella, CA 93240 bbutterbredt@gmail.com	X		X	X	X				6/18/20		6/18/20 7016207000 0049837424	6/22/20	7/22/20	7/23/20, as of this date no comments or requests for consultation have been received 7/28/20, 4:14 PM, CChi called and left a message for consultation notification follow up. 7/29/20, CC sent out a follow up email early morning.
Kern Valley Indian Community Julie Turner, Secretary P. Box 1010 Lake Isabella, CA 93240 meindiangirl@sbcglobal.net	X		X	X	X				6/18/20		6/18/20 7016207000 0049837431	6/22/20	7/22/20	7/23/20, as of this date no comments or requests for consultation have been received 7/29/20, CChi sent out a follow up email early morning.
Kern Valley Indian Community Brandy Kendricks 30741 Foxridge Court Tehachapi, CA 93561 krazykendricks@hotmail.com	X		X	X	X				6/18/20		6/18/20 7016207000 0049837448	6/20/20	7/20/22	7/23/20, as of this date no comments or requests for consultation have been received 7/29/20, CChi sent out a follow up email early morning.

Consultation Notice – ROAD M109 WHITE RIVER BRIDGE REPLACEMENT (CEQA + SEC.106)														
TRIBE CONTACTED	**REQUEST TYPE**			**ITEMS & DOCUMENTS SUBMITTED**					**DELIVERY METHOD**			**CONSULTATION PERIOD (CEQA)**		**CONSULTATION / ACTIONS**
	AB 52	**SB 18**	**Sec 106**	**Map**	**Project Description**	**SLF Search Results**	**CHRIS Results**	**Other**	**E-mail**	**FedEx**	**Certified US Mail**	**Return Receipt**	**Period Ends**	**Summary**
Santa Rosa Rancheria Tachi Yokut Tribe Leo Sisco, Chairperson P. O. Box 8 Lemoore, CA 93245 LSisco@tachi-yokut-nsn.gov	X		X	X	X				6/18/20		6/18/20 7016207000 0049837455	6/22/20	7/22/20	7/23/20, as of this date no comments or requests for consultation have been received 7/28/20, 4:07PM, CChi called the mainline number (559) 924-1278. The operator instructed to leave messages for any of the members trying to be reached; left a message for consultation notification follow up. 7/29/20, CChi sent out a follow up email early morning.
Santa Rosa Rancheria Tachi Yokut Tribe Robert Jeff, Vice-Chair P. O. Box 8 Lemoore, CA 93245 RGJeff@tachi-yokut-nsn.gov	X		X	X	X				6/18/20		6/18/20 7016207000 0049837462	6/22/20	7/22/20	7/23/20, as of this date no comments or requests for consultation have been received 7/28/20, 4:07PM, CChi called the mainline number (559) 924-1278. The operator instructed to leave messages for any of the members trying to be reached; left a message for consultation notification follow up. 7/29/20, CChi sent out a follow up email early morning.
Santa Rosa Rancheria Tachi Yokut Tribe Bianca Arias, Admin. Assistant. P. O. Box 8 Lemoore, CA 93245 BArias@tachi-yokut-nsn.gov	X		X	X	X				6/18/20		6/18/20 7016207000 0049837479	6/22/20	7/22/20	7/23/20, as of this date no comments or requests for consultation have been received 7/28/20, 4:07PM, CChi called the mainline number (559) 924-1278. The operator instructed to leave messages for any of the members trying to be reached; left a message for consultation notification follow up. 7/29/20, CChi sent out a follow up email early morning.

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TRIBE CONTACTED	**REQUEST TYPE**			**ITEMS & DOCUMENTS SUBMITTED**					**DELIVERY METHOD**			**CONSULTATION PERIOD (CEQA)**		**CONSULTATION / ACTIONS**
	AB 52	**SB 18**	**Sec 106**	**Map**	**Project Description**	**SLF Search Results**	**CHRIS Results**	**Other**	**E-mail**	**FedEx**	**Certified US Mail**	**Return Receipt**	**Period Ends**	**Summary**
Santa Rosa Rancheria Cultural Department Shana Powers, Director P. O. Box 8 Lemoore, CA 93245 SPowers@tachi-yokut-nsn.gov	X		X	X	X				6/18/20		6/18/20 7016207000 0049837486	6/22/20	7/22/20	7/23/20, as of this date no comments or requests for consultation have been received 7/28/20, 4:07PM, CChi called the mainline number (559) 924-1278. The operator instructed to leave messages for any of the members trying to be reached; left a message for consultation notification follow up. 7/29/20, CChi sent out a follow up email early morning. 8/3/20, SPowers responded to email indicating that **the Tribe does have concerns and would like to be notified of any discoveries,** but because of the location they would be deferring to the Tejon and Tule River Tribes.
Santa Rosa Rancheria Tachi Yokut Tribe Cultural Department Greg Cuara, Cultural Specialist P. O. Box 8 Lemoore, CA 93245 GCuara@tachi-yokut-nsn.gov	X		X	X	X				6/18/20		6/18/20 7016207000 0049837493	6/22/20	7/22/20	7/23/20, as of this date no comments or requests for consultation have been received 7/28/20, 4:07PM, CChi called the mainline number (559) 924-1278. The operator instructed to leave messages for any of the members trying to be reached; left a message for consultation notification follow up. 7/29/20 , CChi sent out a follow up email early morning.

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	AB 52	**SB 18**	**Sec 106**	**Map**	**Project Description**	**SLF Search Results**	**CHRIS Results**	**Other**	**E-mail**	**FedEx**	**Certified US Mail**	**Return Receipt**	**Period Ends**	**Summary**
Tubatulabals of Kern Valley Robert L. Gomez, Jr., Chairperson P.O. Box 226 Lake Isabella, CA 93240 rgomez@tubatulabal.org	X		X	X	X				6/18/20		6/18/20 7014015000 0115372487	---	---	7/5/20, envelope returned to RMA unopened "Return to sender unclaimed. Unable to forward" 7/23/20, as of this date no comments or requests for consultation have been received 7/29/20, CChi sent out a follow up email early morning.
Tule River Indian Tribe Neil Peyron, Chairperson P. O. Box 589 Porterville, CA 93258 neil.peyron@tulerivertribe-nsn.gov	X		X	X	X				6/18/20		6/18/20 7014015000 0115372494	6/25/20	7/25/20	7/23/20, as of this date no comments or requests for consultation have been received 7/28/20, 3:55 PM, CChi called the same number as Kerri Vera's and got transferred through mainline; Mr. Peyron said he was to check with his EPA office and would get back with us shortly. 7/29/20, CChi sent out a follow up email early morning. 8/28/20, JWillis emailed another follow up email to the tribe indicating that the Santa Rosa Rancheria tribe was deferring to them.
Tule River Indian Tribe Environmental Department Kerri Vera, Director P. O. Box 589 Porterville, CA 93258 tuleriverenv@yahoo.com	X		X	X	X				6/18/20		6/18/20 7014015000 0115370872	6/25/20	7/25/20	7/23/20, as of this date no comments or requests for consultation have been received 7/28/20, 3:50 PM, CChi called, heard message on the mainline, pressed 0, waited and nobody answered and could not leave voice message. 7/29/20, CChi sent out a follow up email early morning. 8/28/20, JWillis emailed another follow up email to the tribe indicating that the Santa

Consultation Notice – ROAD M109 WHITE RIVER BRIDGE REPLACEMENT (CEQA + SEC.106)														
TRIBE CONTACTED	REQUEST TYPE			ITEMS & DOCUMENTS SUBMITTED					DELIVERY METHOD			CONSULTATION PERIOD (CEQA)		CONSULTATION / ACTIONS
	AB 52	SB 18	Sec 106	Map	Project Description	SLF Search Results	CHRIS Results	Other	E-mail	FedEx	Certified US Mail	Return Receipt	Period Ends	Summary
														Rosa Rancheria tribe was deferring to them. 10/26/20, JWillis called and left a voicemail asking for her response (either deferring back to Santa Rosa or providing their comments) 12/7/20, site visit meeting with RMA, Dokken, and Tribe 4/5/21, JWillis email KVera with a copy of the requested geotech memo and requesting verification of previous comments/concerns. 4/27/21, JWillis left a voice message for K. Vera. 4/28/21, JWillis sent a follow up email .
Tule River Indian Tribe Dept. of Environmental Protection Felix Christman, Archaeological Monitor P. O. Box 589 Porterville, CA 93258 tuleriverarchmon1@gmail.com	X		X	X	X				6/18/20		6/18/20 7014015000 0115370889	6/25/20	7/25/20	7/23/20, as of this date no comments or requests for consultation have been received 7/29/20, CChi sent out a follow up email early morning. 8/28/20, JWillis emailed another follow up email to the tribe indicating that the Santa Rosa Rancheria tribe was deferring to them.
Wuksache Indian Tribe/ Eshom Valley Band Kenneth Woodrow, Chairperson 1179 Rock Haven Ct. Salinas, CA 93906 kwood8934@aol.com	X		X	X	X				6/18/20		6/18/20 7014015000 0115370896	6/23/20	7/23/20	7/23/20, as of this date no comments or requests for consultation have been received 7/28/20, 3:45PM, CChi called and left a message for consultation notification follow up. 7/29/20, CChi sent out a follow up email early morning.

RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD
VISALIA, CA 93277
PHONE (559) 624-7000
FAX (559) 730-2653

Aaron R. Bock — Economic Development and Planning
Reed Schenke — Public Works
Sherman Dix — Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

June 18, 2020

Kern Valley Indian Community
Robert Robinson, Co-Chairperson
P.O. Box 1010
Lake Isabella, CA 93240

RE: Project Notification and Consultation Request Pursuant to CEQA's Assembly Bill (AB) 52 and NHPA's Section 106 for the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project

Dear Chairperson Robinson,

Tulare County is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133). The bridge was constructed in 1939 and is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, CA. It is near two unmarked cemeteries in the historic gold mining community known as White River (see enclosed Figures 1 -3). This bridge is one of the primary structures along Mountain Road 109 connecting the unincorporated foothill and mountain communities to the central valley. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 and was flagged Structurally Deficient (SD) due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads. The preliminary project study area amounts to approximately 7 acres. It is located within Section 24 of Township 18 South, Range 29 East of the White River California United States Geographic Survey 7.5-minute topographic quadrangle. The project involves both Tulare County right-of-way and private property (APN 344-030-004 & 344-030-005), and the area is currently zoned as AF (Foothill Agricultural Zone).

Tulare County is acting as the California Environmental Quality Act (CEQA) lead agency. The anticipated CEQA Environmental Documentation is an Initial Study with Mitigate Negative Declaration (IS/MND). The project will utilize federal funding administered through the Federal Highways Authority (FHWA). FHWA has assigned National Environmental Policy Act (NEPA) responsibilities to the California Department of Transportation (Caltrans). As the project involves federal funding, and no FHWA or Caltrans owned facilities/right-of-way, Caltrans is providing NEPA oversight through their District 6 Local Assistance department. As such, it is the responsibility of Tulare County to conduct consultation under both CEQA's AB 52 and Section 106 processes for this project.

In order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places, Tulare County is seeking any information you may have regarding tribal cultural resources (as defined under PRC §21074) or other Native American cultural resources within the project area including:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine;
- Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the California Register of Historical Resources including historic or prehistoric ruins and any burial ground, archaeological, or historic site; and
- Recommended mitigation measures to preserve and/or mitigate potential impacts.

This information is needed so that all concerns may be incorporated into the planning phase of the project. All information provided will remain confidential and exempt from disclosure pursuant to PRC §5097.9, PRC §5097.993, and 36 CFR §296.18.

Sacred Lands File Search

The County requested a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC) on June 16, 2020, for the Project. The SLF search returned on June 17, 2020, with negative results; however, the NAHC recommended consultation with your Tribe. Results of the SLF search will be made available upon the release of the EIR / MND for public review. However, results may be made available to your Tribal Representatives if a written request for consultation is submitted to the County within thirty (30) days of receipt of this letter.

California Historical Resources Information System

A Cultural Resources Assessment Report will be prepared for the project. The report will be prepared in compliance with Section 106 of the National Historic Preservation Act (NHPA; 16 USC 470) and its implementing regulations at 36 CFR 800, as well as the provisions of the California Environmental Quality Act. The report will include research through the Southern San Joaquin Valley Information Center (SSJVIC) and other appropriate data repositories. The Cultural Resources Assessment Report will be made available upon the release of the IS/MND for public review. However, the report may be made available to your Tribal Representatives if a written request for consultation is submitted to the County within thirty (30) days of receipt of this letter.

Please consider this letter and preliminary project information as formal notification of the proposed project as required under CEQA, specifically PRC § 21080.3.1 and Chapter 532 Statutes of 2014 (i.e. AB 52), and under Section 106 of the NHPA. Please respond within thirty (30) days, pursuant to PRC §21080.3.1(d) if you would like to consult on this project. Please provide a designated lead contact person if you have not provided that information to us already. Written correspondence can be mailed to the address provided above or e-mailed to the addresses provided below.

If the County does not receive a response to this notification within thirty (days), it will be presumed that your Tribe has declined the opportunity to consult on this project.

Thank you for your consideration on this matter. Your comments and concerns will be important to Tulare County as we move forward with the project. If you have questions regarding the content of this letter, please do not hesitate to contact me at the email address or phone number below. If I am unavailable and you need immediate assistance, please contact Jessica Willis, Planner IV, by email at jwillis@co.tulare.ca.us or by phone at (559) 624-7122. If you have any questions regarding the project, please contact Jason Vivian, Project Manager, by email at jvivian@co.tulare.ca.us or by phone at (559) 624-7135.

Sincerely,

Hector Guerra
Chief Environmental Planner
(559) 624-7121
hguerra@co.tulare.ca.us

Attachment: Project Notification and Tribal Consultation Request

RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD
VISALIA, CA 93277
PHONE (559) 624-7000
FAX (559) 730-2653

Aaron R. Bock — Economic Development and Planning
Reed Schenke — Public Works
Sherman Dix — Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

June 18, 2020

Kern Valley Indian Community
Brandy Kendricks, Secretary
30741 Foxridge Court
Tehachapi, CA 93561

RE: Project Notification and Consultation Request Pursuant to CEQA's Assembly Bill (AB) 52 and NHPA's Section 106 for the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project

Dear Ms. Kendricks,

Tulare County is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133). The bridge was constructed in 1939 and is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, CA. It is near two unmarked cemeteries in the historic gold mining community known as White River (see enclosed Figures 1 -3). This bridge is one of the primary structures along Mountain Road 109 connecting the unincorporated foothill and mountain communities to the central valley. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 and was flagged Structurally Deficient (SD) due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads. The preliminary project study area amounts to approximately 7 acres. It is located within Section 24 of Township 18 South, Range 29 East of the White River California United States Geographic Survey 7.5-minute topographic quadrangle. The project involves both Tulare County right-of-way and private property (APN 344-030-004 & 344-030-005), and the area is currently zoned as AF (Foothill Agricultural Zone).

Tulare County is acting as the California Environmental Quality Act (CEQA) lead agency. The anticipated CEQA Environmental Documentation is an Initial Study with Mitigate Negative Declaration (IS/MND). The project will utilize federal funding administered through the Federal Highways Authority (FHWA). FHWA has assigned National Environmental Policy Act (NEPA) responsibilities to the California Department of Transportation (Caltrans). As the project involves federal funding, and no FHWA or Caltrans owned facilities/right-of-way, Caltrans is providing NEPA oversight through their District 6 Local Assistance department. As such, it is the responsibility of Tulare County to conduct consultation under both CEQA's AB 52 and Section 106 processes for this project.

In order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places, Tulare County is seeking any information you may have regarding tribal cultural resources (as defined under PRC §21074) or other Native American cultural resources within the project area including:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine;
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Sacred Lands File Search

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Chief Environmental Planner
(559) 624-7121
hguerra@co.tulare.ca.us

Attachment: Project Notification and Tribal Consultation Request

RESOURCE MANAGEMENT AGENCY

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VISALIA, CA 93277
PHONE (559) 624-7000
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Aaron R. Bock — Economic Development and Planning
Reed Schenke — Public Works
Sherman Dix — Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

June 18, 2020

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas, CA 93906

RE: Project Notification and Consultation Request Pursuant to CEQA's Assembly Bill (AB) 52 and NHPA's Section 106 for the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project

Dear Chairperson Woodrow,

Tulare County is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133). The bridge was constructed in 1939 and is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, CA. It is near two unmarked cemeteries in the historic gold mining community known as White River (see enclosed Figures 1 -3). This bridge is one of the primary structures along Mountain Road 109 connecting the unincorporated foothill and mountain communities to the central valley. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 and was flagged Structurally Deficient (SD) due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads. The preliminary project study area amounts to approximately 7 acres. It is located within Section 24 of Township 18 South, Range 29 East of the White River California United States Geographic Survey 7.5-minute topographic quadrangle. The project involves both Tulare County right-of-way and private property (APN 344-030-004 & 344-030-005), and the area is currently zoned as AF (Foothill Agricultural Zone).

Tulare County is acting as the California Environmental Quality Act (CEQA) lead agency. The anticipated CEQA Environmental Documentation is an Initial Study with Mitigate Negative Declaration (IS/MND). The project will utilize federal funding administered through the Federal Highways Authority (FHWA). FHWA has assigned National Environmental Policy Act (NEPA) responsibilities to the California Department of Transportation (Caltrans). As the project involves federal funding, and no FHWA or Caltrans owned facilities/right-of-way, Caltrans is providing NEPA oversight through their District 6 Local Assistance department. As such, it is the responsibility of Tulare County to conduct consultation under both CEQA's AB 52 and Section 106 processes for this project.

In order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places, Tulare County is seeking any information you may have regarding tribal cultural resources (as defined under PRC §21074) or other Native American cultural resources within the project area including:

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Sincerely,

Hector Guerra
Chief Environmental Planner
(559) 624-7121
hguerra@co.tulare.ca.us

Attachment: Project Notification and Tribal Consultation Request

RESOURCE MANAGEMENT AGENCY

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VISALIA, CA 93277
PHONE (559) 624-7000
FAX (559) 730-2653

Aaron R. Bock — Economic Development and Planning
Reed Schenke — Public Works
Sherman Dix — Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

June 18, 2020

Tule River Indian Tribe
Environmental Department
Kerri Vera, Director
P.O. Box 589
Porterville, CA 93258

RE: Project Notification and Consultation Request Pursuant to CEQA's Assembly Bill (AB) 52 and NHPA's Section 106 for the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project

Dear Ms. Vera,

Tulare County is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133). The bridge was constructed in 1939 and is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, CA. It is near two unmarked cemeteries in the historic gold mining community known as White River (see enclosed Figures 1 -3). This bridge is one of the primary structures along Mountain Road 109 connecting the unincorporated foothill and mountain communities to the central valley. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 and was flagged Structurally Deficient (SD) due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads. The preliminary project study area amounts to approximately 7 acres. It is located within Section 24 of Township 18 South, Range 29 East of the White River California United States Geographic Survey 7.5-minute topographic quadrangle. The project involves both Tulare County right-of-way and private property (APN 344-030-004 & 344-030-005), and the area is currently zoned as AF (Foothill Agricultural Zone).

Tulare County is acting as the California Environmental Quality Act (CEQA) lead agency. The anticipated CEQA Environmental Documentation is an Initial Study with Mitigate Negative Declaration (IS/MND). The project will utilize federal funding administered through the Federal Highways Authority (FHWA). FHWA has assigned National Environmental Policy Act (NEPA) responsibilities to the California Department of Transportation (Caltrans). As the project involves federal funding, and no FHWA or Caltrans owned facilities/right-of-way, Caltrans is providing NEPA oversight through their District 6 Local Assistance department. As such, it is the responsibility of Tulare County to conduct consultation under both CEQA's AB 52 and Section 106 processes for this project.

In order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places, Tulare County is seeking any information you may have regarding tribal cultural resources (as defined under PRC §21074) or other Native American cultural resources within the project area including:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine;
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Sincerely,

Hector Guerra
Chief Environmental Planner
(559) 624-7121
hguerra@co.tulare.ca.us

Attachment: Project Notification and Tribal Consultation Request

RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD
VISALIA, CA 93277
PHONE (559) 624-7000
FAX (559) 730-2653

Aaron R. Bock — Economic Development and Planning
Reed Schenke — Public Works
Sherman Dix — Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

June 18, 2020

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589
Porterville, CA 93258

RE: Project Notification and Consultation Request Pursuant to CEQA's Assembly Bill (AB) 52 and NHPA's Section 106 for the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project

Dear Chairperson Peyron,

Tulare County is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133). The bridge was constructed in 1939 and is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, CA. It is near two unmarked cemeteries in the historic gold mining community known as White River (see enclosed Figures 1 -3). This bridge is one of the primary structures along Mountain Road 109 connecting the unincorporated foothill and mountain communities to the central valley. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 and was flagged Structurally Deficient (SD) due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads. The preliminary project study area amounts to approximately 7 acres. It is located within Section 24 of Township 18 South, Range 29 East of the White River California United States Geographic Survey 7.5-minute topographic quadrangle. The project involves both Tulare County right-of-way and private property (APN 344-030-004 & 344-030-005), and the area is currently zoned as AF (Foothill Agricultural Zone).

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Hector Guerra
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Aaron R. Bock — Economic Development and Planning
Reed Schenke — Public Works
Sherman Dix — Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

June 18, 2020

Tule River Indian Tribe
Department of Environmental Protection
Felix Christman, Archaeological Monitor
P.O. Box 589
Porterville, CA 93258

RE: Project Notification and Consultation Request Pursuant to CEQA's Assembly Bill (AB) 52 and NHPA's Section 106 for the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project

Dear Mr. Christman,

Tulare County is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133). The bridge was constructed in 1939 and is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, CA. It is near two unmarked cemeteries in the historic gold mining community known as White River (see enclosed Figures 1 -3). This bridge is one of the primary structures along Mountain Road 109 connecting the unincorporated foothill and mountain communities to the central valley. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 and was flagged Structurally Deficient (SD) due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads. The preliminary project study area amounts to approximately 7 acres. It is located within Section 24 of Township 18 South, Range 29 East of the White River California United States Geographic Survey 7.5-minute topographic quadrangle. The project involves both Tulare County right-of-way and private property (APN 344-030-004 & 344-030-005), and the area is currently zoned as AF (Foothill Agricultural Zone).

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Sincerely,

Hector Guerra
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Aaron R. Bock — Economic Development and Planning
Reed Schenke — Public Works
Sherman Dix — Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

June 18, 2020

Tubatulabals of Kern Valley
Robert L. Gomez, Jr., Chairperson
P.O. Box 226
Lake Isabella, CA 93240

RE: Project Notification and Consultation Request Pursuant to CEQA's Assembly Bill (AB) 52 and NHPA's Section 106 for the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project

Dear Chairperson Gomez, Jr.,

Tulare County is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133). The bridge was constructed in 1939 and is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, CA. It is near two unmarked cemeteries in the historic gold mining community known as White River (see enclosed Figures 1 -3). This bridge is one of the primary structures along Mountain Road 109 connecting the unincorporated foothill and mountain communities to the central valley. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 and was flagged Structurally Deficient (SD) due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads. The preliminary project study area amounts to approximately 7 acres. It is located within Section 24 of Township 18 South, Range 29 East of the White River California United States Geographic Survey 7.5-minute topographic quadrangle. The project involves both Tulare County right-of-way and private property (APN 344-030-004 & 344-030-005), and the area is currently zoned as AF (Foothill Agricultural Zone).

Tulare County is acting as the California Environmental Quality Act (CEQA) lead agency. The anticipated CEQA Environmental Documentation is an Initial Study with Mitigate Negative Declaration (IS/MND). The project will utilize federal funding administered through the Federal Highways Authority (FHWA). FHWA has assigned National Environmental Policy Act (NEPA) responsibilities to the California Department of Transportation (Caltrans). As the project involves federal funding, and no FHWA or Caltrans owned facilities/right-of-way, Caltrans is providing NEPA oversight through their District 6 Local Assistance department. As such, it is the responsibility of Tulare County to conduct consultation under both CEQA's AB 52 and Section 106 processes for this project.

In order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places, Tulare County is seeking any information you may have regarding tribal cultural resources (as defined under PRC §21074) or other Native American cultural resources within the project area including:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine;
- Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the California Register of Historical Resources including historic or prehistoric ruins and any burial ground, archaeological, or historic site; and
- Recommended mitigation measures to preserve and/or mitigate potential impacts.

This information is needed so that all concerns may be incorporated into the planning phase of the project. All information provided will remain confidential and exempt from disclosure pursuant to PRC §5097.9, PRC §5097.993, and 36 CFR §296.18.

Sacred Lands File Search

The County requested a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC) on June 16, 2020, for the Project. The SLF search returned on June 17, 2020, with negative results; however, the NAHC recommended consultation with your Tribe. Results of the SLF search will be made available upon the release of the EIR / MND for public review. However, results may be made available to your Tribal Representatives if a written request for consultation is submitted to the County within thirty (30) days of receipt of this letter.

California Historical Resources Information System

A Cultural Resources Assessment Report will be prepared for the project. The report will be prepared in compliance with Section 106 of the National Historic Preservation Act (NHPA; 16 USC 470) and its implementing regulations at 36 CFR 800, as well as the provisions of the California Environmental Quality Act. The report will include research through the Southern San Joaquin Valley Information Center (SSJVIC) and other appropriate data repositories. The Cultural Resources Assessment Report will be made available upon the release of the IS/MND for public review. However, the report may be made available to your Tribal Representatives if a written request for consultation is submitted to the County within thirty (30) days of receipt of this letter.

Please consider this letter and preliminary project information as formal notification of the proposed project as required under CEQA, specifically PRC § 21080.3.1 and Chapter 532 Statutes of 2014 (i.e. AB 52), and under Section 106 of the NHPA. Please respond within thirty (30) days, pursuant to PRC §21080.3.1(d) if you would like to consult on this project. Please provide a designated lead contact person if you have not provided that information to us already. Written correspondence can be mailed to the address provided above or e-mailed to the addresses provided below.

If the County does not receive a response to this notification within thirty (days), it will be presumed that your Tribe has declined the opportunity to consult on this project.

Thank you for your consideration on this matter. Your comments and concerns will be important to Tulare County as we move forward with the project. If you have questions regarding the content of this letter, please do not hesitate to contact me at the email address or phone number below. If I am unavailable and you need immediate assistance, please contact Jessica Willis, Planner IV, by email at jwillis@co.tulare.ca.us or by phone at (559) 624-7122. If you have any questions regarding the project, please contact Jason Vivian, Project Manager, by email at jvivian@co.tulare.ca.us or by phone at (559) 624-7135.

Sincerely,

Hector Guerra
Chief Environmental Planner
(559) 624-7121
hguerra@co.tulare.ca.us

Attachment: Project Notification and Tribal Consultation Request

RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD
VISALIA, CA 93277
PHONE (559) 624-7000
FAX (559) 730-2653

Aaron R. Bock — Economic Development and Planning
Reed Schenke — Public Works
Sherman Dix — Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

June 18, 2020

Santa Rosa Rancheria Tachi Yokut Tribe
Leo Sisco, Chairperson
P.O. Box 8
Lemoore, CA 93245

RE: Project Notification and Consultation Request Pursuant to CEQA's Assembly Bill (AB) 52 and NHPA's Section 106 for the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project

Dear Chairperson Sisco,

Tulare County is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133). The bridge was constructed in 1939 and is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, CA. It is near two unmarked cemeteries in the historic gold mining community known as White River (see enclosed Figures 1 -3). This bridge is one of the primary structures along Mountain Road 109 connecting the unincorporated foothill and mountain communities to the central valley. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 and was flagged Structurally Deficient (SD) due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads. The preliminary project study area amounts to approximately 7 acres. It is located within Section 24 of Township 18 South, Range 29 East of the White River California United States Geographic Survey 7.5-minute topographic quadrangle. The project involves both Tulare County right-of-way and private property (APN 344-030-004 & 344-030-005), and the area is currently zoned as AF (Foothill Agricultural Zone).

Tulare County is acting as the California Environmental Quality Act (CEQA) lead agency. The anticipated CEQA Environmental Documentation is an Initial Study with Mitigate Negative Declaration (IS/MND). The project will utilize federal funding administered through the Federal Highways Authority (FHWA). FHWA has assigned National Environmental Policy Act (NEPA) responsibilities to the California Department of Transportation (Caltrans). As the project involves federal funding, and no FHWA or Caltrans owned facilities/right-of-way, Caltrans is providing NEPA oversight through their District 6 Local Assistance department. As such, it is the responsibility of Tulare County to conduct consultation under both CEQA's AB 52 and Section 106 processes for this project.

In order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places, Tulare County is seeking any information you may have regarding tribal cultural resources (as defined under PRC §21074) or other Native American cultural resources within the project area including:

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Sincerely,

Hector Guerra
Chief Environmental Planner
(559) 624-7121
hguerra@co.tulare.ca.us

Attachment: Project Notification and Tribal Consultation Request

RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD
VISALIA, CA 93277
PHONE (559) 624-7000
FAX (559) 730-2653

Aaron R. Bock — Economic Development and Planning
Reed Schenke — Public Works
Sherman Dix — Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

June 18, 2020

Santa Rosa Rancheria Tachi Yokut Tribe
Cultural Department
Shana Powers, Director
P.O. Box 8
Lemoore, CA 93245

RE: Project Notification and Consultation Request Pursuant to CEQA's Assembly Bill (AB) 52 and NHPA's Section 106 for the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project

Dear Ms. Powers,

Tulare County is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133). The bridge was constructed in 1939 and is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, CA. It is near two unmarked cemeteries in the historic gold mining community known as White River (see enclosed Figures 1 -3). This bridge is one of the primary structures along Mountain Road 109 connecting the unincorporated foothill and mountain communities to the central valley. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 and was flagged Structurally Deficient (SD) due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads. The preliminary project study area amounts to approximately 7 acres. It is located within Section 24 of Township 18 South, Range 29 East of the White River California United States Geographic Survey 7.5-minute topographic quadrangle. The project involves both Tulare County right-of-way and private property (APN 344-030-004 & 344-030-005), and the area is currently zoned as AF (Foothill Agricultural Zone).

Tulare County is acting as the California Environmental Quality Act (CEQA) lead agency. The anticipated CEQA Environmental Documentation is an Initial Study with Mitigate Negative Declaration (IS/MND). The project will utilize federal funding administered through the Federal Highways Authority (FHWA). FHWA has assigned National Environmental Policy Act (NEPA) responsibilities to the California Department of Transportation (Caltrans). As the project involves federal funding, and no FHWA or Caltrans owned facilities/right-of-way, Caltrans is providing NEPA oversight through their District 6 Local Assistance department. As such, it is the responsibility of Tulare County to conduct consultation under both CEQA's AB 52 and Section 106 processes for this project.

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Thank you for your consideration on this matter. Your comments and concerns will be important to Tulare County as we move forward with the project. If you have questions regarding the content of this letter, please do not hesitate to contact me at the email address or phone number below. If I am unavailable and you need immediate assistance, please contact Jessica Willis, Planner IV, by email at jwillis@co.tulare.ca.us or by phone at (559) 624-7122. If you have any questions regarding the project, please contact Jason Vivian, Project Manager, by email at jvivian@co.tulare.ca.us or by phone at (559) 624-7135.

Sincerely,

Hector Guerra
Chief Environmental Planner
(559) 624-7121
hguerra@co.tulare.ca.us

Attachment: Project Notification and Tribal Consultation Request

RESOURCE MANAGEMENT AGENCY

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Aaron R. Bock — Economic Development and Planning
Reed Schenke — Public Works
Sherman Dix — Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

June 18, 2020

Santa Rosa Rancheria Tachi Yokut Tribe
Robert Jeff, Vice-Chair
P.O. Box 8
Lemoore, CA 93245

RE: Project Notification and Consultation Request Pursuant to CEQA's Assembly Bill (AB) 52 and NHPA's Section 106 for the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project

Dear Vice-Chair Jeff,

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In order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places, Tulare County is seeking any information you may have regarding tribal cultural resources (as defined under PRC §21074) or other Native American cultural resources within the project area including:

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Sincerely,

Hector Guerra
Chief Environmental Planner
(559) 624-7121
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Attachment: Project Notification and Tribal Consultation Request

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Aaron R. Bock — Economic Development and Planning
Reed Schenke — Public Works
Sherman Dix — Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

June 18, 2020

Santa Rosa Rancheria Tachi Yokut Tribe
Cultural Department
Greg Cuara, Cultural Specialist
P.O. Box 8
Lemoore, CA 93245

RE: Project Notification and Consultation Request Pursuant to CEQA's Assembly Bill (AB) 52 and NHPA's Section 106 for the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project

Dear Mr. Cuara,

Tulare County is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133). The bridge was constructed in 1939 and is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, CA. It is near two unmarked cemeteries in the historic gold mining community known as White River (see enclosed Figures 1 -3). This bridge is one of the primary structures along Mountain Road 109 connecting the unincorporated foothill and mountain communities to the central valley. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 and was flagged Structurally Deficient (SD) due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads. The preliminary project study area amounts to approximately 7 acres. It is located within Section 24 of Township 18 South, Range 29 East of the White River California United States Geographic Survey 7.5-minute topographic quadrangle. The project involves both Tulare County right-of-way and private property (APN 344-030-004 & 344-030-005), and the area is currently zoned as AF (Foothill Agricultural Zone).

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Aaron R. Bock — Economic Development and Planning
Reed Schenke — Public Works
Sherman Dix — Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

June 18, 2020

Santa Rosa Rancheria Tachi Yokut Tribe
Bianca Arias, Admin. Assistant
P.O. Box 8
Lemoore, CA 93245

RE: Project Notification and Consultation Request Pursuant to CEQA's Assembly Bill (AB) 52 and NHPA's Section 106 for the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project

Dear Ms. Arias,

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- Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the California Register of Historical Resources including historic or prehistoric ruins and any burial ground, archaeological, or historic site; and
- Recommended mitigation measures to preserve and/or mitigate potential impacts.

This information is needed so that all concerns may be incorporated into the planning phase of the project. All information provided will remain confidential and exempt from disclosure pursuant to PRC §5097.9, PRC §5097.993, and 36 CFR §296.18.

Sacred Lands File Search

The County requested a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC) on June 16, 2020, for the Project. The SLF search returned on June 17, 2020, with negative results; however, the NAHC recommended consultation with your Tribe. Results of the SLF search will be made available upon the release of the EIR / MND for public review. However, results may be made available to your Tribal Representatives if a written request for consultation is submitted to the County within thirty (30) days of receipt of this letter.

California Historical Resources Information System

A Cultural Resources Assessment Report will be prepared for the project. The report will be prepared in compliance with Section 106 of the National Historic Preservation Act (NHPA; 16 USC 470) and its implementing regulations at 36 CFR 800, as well as the provisions of the California Environmental Quality Act. The report will include research through the Southern San Joaquin Valley Information Center (SSJVIC) and other appropriate data repositories. The Cultural Resources Assessment Report will be made available upon the release of the IS/MND for public review. However, the report may be made available to your Tribal Representatives if a written request for consultation is submitted to the County within thirty (30) days of receipt of this letter.

Please consider this letter and preliminary project information as formal notification of the proposed project as required under CEQA, specifically PRC § 21080.3.1 and Chapter 532 Statutes of 2014 (i.e. AB 52), and under Section 106 of the NHPA. Please respond within thirty (30) days, pursuant to PRC §21080.3.1(d) if you would like to consult on this project. Please provide a designated lead contact person if you have not provided that information to us already. Written correspondence can be mailed to the address provided above or e-mailed to the addresses provided below.

If the County does not receive a response to this notification within thirty (days), it will be presumed that your Tribe has declined the opportunity to consult on this project.

Thank you for your consideration on this matter. Your comments and concerns will be important to Tulare County as we move forward with the project. If you have questions regarding the content of this letter, please do not hesitate to contact me at the email address or phone number below. If I am unavailable and you need immediate assistance, please contact Jessica Willis, Planner IV, by email at jwillis@co.tulare.ca.us or by phone at (559) 624-7122. If you have any questions regarding the project, please contact Jason Vivian, Project Manager, by email at jvivian@co.tulare.ca.us or by phone at (559) 624-7135.

Sincerely,

Hector Guerra
Chief Environmental Planner
(559) 624-7121
hguerra@co.tulare.ca.us

Attachment: Project Notification and Tribal Consultation Request

RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD
VISALIA, CA 93277
PHONE (559) 624-7000
FAX (559) 730-2653

Aaron R. Bock — Economic Development and Planning
Reed Schenke — Public Works
Sherman Dix — Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

June 18, 2020

Kern Valley Indian Community
Julie Turner, Secretary
P.O. Box 1010
Lake Isabella, CA 93240

RE: Project Notification and Consultation Request Pursuant to CEQA's Assembly Bill (AB) 52 and NHPA's Section 106 for the Road M109 White River Bridge (Bridge No. 46C-0133) Replacement Project

Dear Ms. Turner,

Tulare County is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133). The bridge was constructed in 1939 and is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, CA. It is near two unmarked cemeteries in the historic gold mining community known as White River (see enclosed Figures 1 -3). This bridge is one of the primary structures along Mountain Road 109 connecting the unincorporated foothill and mountain communities to the central valley. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 and was flagged Structurally Deficient (SD) due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads. The preliminary project study area amounts to approximately 7 acres. It is located within Section 24 of Township 18 South, Range 29 East of the White River California United States Geographic Survey 7.5-minute topographic quadrangle. The project involves both Tulare County right-of-way and private property (APN 344-030-004 & 344-030-005), and the area is currently zoned as AF (Foothill Agricultural Zone).

Tulare County is acting as the California Environmental Quality Act (CEQA) lead agency. The anticipated CEQA Environmental Documentation is an Initial Study with Mitigate Negative Declaration (IS/MND). The project will utilize federal funding administered through the Federal Highways Authority (FHWA). FHWA has assigned National Environmental Policy Act (NEPA) responsibilities to the California Department of Transportation (Caltrans). As the project involves federal funding, and no FHWA or Caltrans owned facilities/right-of-way, Caltrans is providing NEPA oversight through their District 6 Local Assistance department. As such, it is the responsibility of Tulare County to conduct consultation under both CEQA's AB 52 and Section 106 processes for this project.

In order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places, Tulare County is seeking any information you may have regarding tribal cultural resources (as defined under PRC §21074) or other Native American cultural resources within the project area including:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine;
- Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the California Register of Historical Resources including historic or prehistoric ruins and any burial ground, archaeological, or historic site; and
- Recommended mitigation measures to preserve and/or mitigate potential impacts.

This information is needed so that all concerns may be incorporated into the planning phase of the project. All information provided will remain confidential and exempt from disclosure pursuant to PRC §5097.9, PRC §5097.993, and 36 CFR §296.18.

Sacred Lands File Search

The County requested a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC) on June 16, 2020, for the Project. The SLF search returned on June 17, 2020, with negative results; however, the NAHC recommended consultation with your Tribe. Results of the SLF search will be made available upon the release of the EIR / MND for public review. However, results may be made available to your Tribal Representatives if a written request for consultation is submitted to the County within thirty (30) days of receipt of this letter.

California Historical Resources Information System

A Cultural Resources Assessment Report will be prepared for the project. The report will be prepared in compliance with Section 106 of the National Historic Preservation Act (NHPA; 16 USC 470) and its implementing regulations at 36 CFR 800, as well as the provisions of the California Environmental Quality Act. The report will include research through the Southern San Joaquin Valley Information Center (SSJVIC) and other appropriate data repositories. The Cultural Resources Assessment Report will be made available upon the release of the IS/MND for public review. However, the report may be made available to your Tribal Representatives if a written request for consultation is submitted to the County within thirty (30) days of receipt of this letter.

Please consider this letter and preliminary project information as formal notification of the proposed project as required under CEQA, specifically PRC § 21080.3.1 and Chapter 532 Statutes of 2014 (i.e. AB 52), and under Section 106 of the NHPA. Please respond within thirty (30) days, pursuant to PRC §21080.3.1(d) if you would like to consult on this project. Please provide a designated lead contact person if you have not provided that information to us already. Written correspondence can be mailed to the address provided above or e-mailed to the addresses provided below.

If the County does not receive a response to this notification within thirty (days), it will be presumed that your Tribe has declined the opportunity to consult on this project.

Thank you for your consideration on this matter. Your comments and concerns will be important to Tulare County as we move forward with the project. If you have questions regarding the content of this letter, please do not hesitate to contact me at the email address or phone number below. If I am unavailable and you need immediate assistance, please contact Jessica Willis, Planner IV, by email at jwillis@co.tulare.ca.us or by phone at (559) 624-7122. If you have any questions regarding the project, please contact Jason Vivian, Project Manager, by email at jvivian@co.tulare.ca.us or by phone at (559) 624-7135.

Sincerely,

Hector Guerra
Chief Environmental Planner
(559) 624-7121
hguerra@co.tulare.ca.us

Attachment: Project Notification and Tribal Consultation Request

From: Cheng Chi
To: bbutterbredt@gmail.com
CC: Jessica Willis
Date: 7/29/2020 9:49 AM
Subject: Fwd: M109 White River Bridge Replacement Project_Tribal Consultation AB52 & Sec 106
Attachments: M109 WhiteRivBridge_Kern_Robinson.doc; Project Description for 106_AB52 letters_M109 WhiteRivBridge.docx; ProjectStudyArea_M109WhiteRivBridge.pdf

Good morning Mr. Robinson,

The consultation period for this project actually ended on 7/22/20, and I am just conducting a follow up as a courtesy. The contents for this project consultation notification were sent out to you through both certified mail and email on 6/18/20, and we have not received any responses from the Tribe as of today. Allow me to forward the email to you again below. If we do not get any responses from the tribe, the County shall considered it as no concerns from the tribe. Thank you.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

>>> Cheng Chi 6/18/2020 2:25 PM >>>
Good afternoon Mr. Robinson,

Physical copy of this project's tribal consultation has been mailed to you through certified mail this afternoon.
Please see the attachments as I am emailing the materials to you too.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

From: Cheng Chi
To: meindiangirl@sbcglobal.net
CC: Jessica Willis
Date: 7/29/2020 9:47 AM
Subject: Fwd: M109 White River Bridge Replacement Project_Tribal Consultation AB52 & Sec 106
Attachments: M109 WhiteRivBridge_Kern_Turner.doc; Project Description for 106_AB52 letters_M109 WhiteRivBridge.docx; ProjectStudyArea_M109WhiteRivBridge.pdf

Good morning Ms. Turner,

The consultation period for this project actually ended on 7/22/20, and I am just conducting a follow up as a courtesy. The contents for this project consultation notification were sent out to you through both certified mail and email on 6/18/20, and we have not received any responses from the Tribe as of today. Allow me to forward the email to you again below. If we do not get any responses from the tribe, the County shall considered it as no concerns from the tribe. Thank you.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

>>> Cheng Chi 6/18/2020 2:37 PM >>>
Good afternoon Ms. Turner,

Physical copy of this project's tribal consultation has been mailed to you through certified mail this afternoon.
Allow me to email these materials to you too.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

From: Cheng Chi
To: krazykendricks@hotmail.com
CC: Jessica Willis
Date: 7/29/2020 9:46 AM
Subject: Fwd: M109 White River Bridge Replacement Project_Tribal Consultation AB52 & Sec 106
Attachments: M109 WhiteRivBridge_Kern_Kendricks.doc; Project Description for 106_AB52 letters_M109 WhiteRivBridge.docx; ProjectStudyArea_M109WhiteRivBridge.pdf

Good morning Ms. Kendricks,

The consultation period for this project actually ended on 7/20/20, and I am just conducting a follow up as a courtesy. The contents for this project consultation notification were sent out to you through both certified mail and email on 6/18/20, and we have not received any responses from the Tribe as of today. Allow me to forward the email to you again below. If we do not get any responses from the tribe, the County shall considered it as no concerns from the tribe. Thank you.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

>>> Cheng Chi 6/18/2020 2:43 PM >>>
Good afternoon Ms. Kendricks,

Physical copy of this project's tribal consultation has been mailed to you through certified mail this afternoon. Allow me to email these materials to you too.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

From: Cheng Chi
To: LSisco@tachi-yokut-nsn.gov
CC: Jessica Willis
Date: 7/29/2020 9:43 AM
Subject: Fwd: M109 White River Bridge Replacement Project_Tribal Consultation AB52 & Sec 106
Attachments: M109 WhiteRivBridge_Santa Rosa Rancheria_Sisco.doc; Project Description for 106_AB52 letters_M109 WhiteRivBridge.docx; ProjectStudyArea_M109WhiteRivBridge.pdf

Good morning Mr. Sisco,

The consultation period for this project actually ended on 7/22/20, and I am just conducting a follow up as a courtesy. The contents for this project consultation notification were sent out to you through both certified mail and email on 6/18/20, and we have not received any responses from the Tribe as of today. Allow me to forward the email to you again below. If we do not get any responses from the tribe, the County shall considered it as no concerns from the tribe. Thank you.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

>>> Cheng Chi 6/18/2020 2:47 PM >>>
Good afternoon Mr. Sisco,

Physical copy of this project's tribal consultation has been mailed to you through certified mail this afternoon. Allow me to email these materials to you too.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

From: Cheng Chi
To: RGJeff@tachi-yokut-nsn.gov
CC: Jessica Willis
Date: 7/29/2020 9:41 AM
Subject: Fwd: M109 White River Bridge Replacement Project_Tribal Consultation AB52 & Sec 106
Attachments: M109 WhiteRivBridge_Santa Rosa Rancheria_Jeff.doc; Project Description for 106_AB52 letters_M109 WhiteRivBridge.docx; ProjectStudyArea_M109WhiteRivBridge.pdf

Good morning Mr. Jeff,

The consultation period for this project actually ended on 7/22/20, and I am just conducting a follow up as a courtesy. The contents for this project consultation notification were sent out to you through both certified mail and email on 6/18/20, and we have not received any responses from the Tribe as of today. Allow me to forward the email to you again below. If we do not get any responses from the tribe, the County shall considered it as no concerns from the tribe. Thank you.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

>>> Cheng Chi 6/18/2020 2:54 PM >>>
Good afternoon Mr. Jeff,

Physical copy of this project's tribal consultation has been mailed to you through certified mail this afternoon. Allow me to email these materials to you too.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

From: Cheng Chi
To: SPowers@tachi-yokut-nsn.gov
CC: Jessica Willis
Date: 7/29/2020 9:36 AM
Subject: Fwd: M109 White River Bridge Replacement Project_Tribal Consultation AB52 & Sec 106
Attachments: M109 WhiteRivBridge_Santa Rosa Rancheria_Powers.doc; Project Description for 106_AB52 letters_M109 WhiteRivBridge.docx; ProjectStudyArea_M109WhiteRivBridge.pdf

Good morning Ms. Powers,

The consultation period for this project actually ended on 7/22/20, and I am just conducting a follow up as a courtesy. The contents for this project consultation notification were sent out to you through both certified mail and email on 6/18/20, and we have not received any responses from the Tribe as of today. Allow me to forward the email to you again below. If we do not get any responses from the tribe, the County shall considered it as no concerns from the tribe. Thank you.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

>>> Cheng Chi 6/18/2020 3:04 PM >>>
Good afternoon Ms. Powers,

Physical copy of this project's tribal consultation has been mailed to you through certified mail this afternoon. Allow me to email these materials to you too.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

From: Cheng Chi
To: GCuara@tachi-yokut-nsn.gov
CC: Jessica Willis
Date: 7/29/2020 9:18 AM
Subject: Fwd: M109 White River Bridge Replacement Project_Tribal Consultation AB52 & Sec 106
Attachments: M109 WhiteRivBridge_Santa Rosa Rancheria_Cuara.doc; Project Description for 106_AB52 letters_M109 WhiteRivBridge.docx; ProjectStudyArea_M109WhiteRivBridge.pdf

Good morning Mr. Cuara,

The consultation period for this project actually ended on 7/22/20, and I am just conducting a follow up as a courtesy. The contents for this project consultation notification were sent out to you through both certified mail and email on 6/18/20, and we have not received any responses from the Tribe as of today. Allow me to forward the email to you again below. If we do not get any responses from the tribe, the County shall considered it as no concerns from the tribe. Thank you.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

>>> Cheng Chi 6/18/2020 3:07 PM >>>
Good afternoon Mr. Cuara,

Physical copy of this project's tribal consultation has been mailed to you through certified mail this afternoon. Allow me to email these materials to you too.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

From: Cheng Chi
To: BArias@tachi-yokut-nsn.gov
CC: Jessica Willis
Date: 7/29/2020 9:38 AM
Subject: Fwd: M109 White River Bridge Replacement Project_Tribal Consultation AB52 & Sec 106
Attachments: M109 WhiteRivBridge_Santa Rosa Rancheria_Arias.doc; Project Description for 106_AB52 letters_M109 WhiteRivBridge.docx; ProjectStudyArea_M109WhiteRivBridge.pdf

Good morning Ms. Arias,

The consultation period for this project actually ended on 7/22/20, and I am just conducting a follow up as a courtesy. The contents for this project consultation notification were sent out to you through both certified mail and email on 6/18/20, and we have not received any responses from the Tribe as of today. Allow me to forward the email to you again below. If we do not get any responses from the tribe, the County shall considered it as no concerns from the tribe. Thank you.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

>>> Cheng Chi 6/18/2020 3:02 PM >>>
Good afternoon Ms. Arias,

Physical copy of this project's tribal consultation has been mailed to you through certified mail this afternoon. Allow me to email these materials to you too.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

From: Cheng Chi
To: rgomez@tubatulabal.org
CC: Jessica Willis
Date: 7/29/2020 8:41 AM
Subject: Fwd: M109 White River Bridge Replacement Project_Tribal Consultation AB52 & Sec 106
Attachments: M109 WhiteRivBridge_Tubatulabals_Gomez.doc; Project Description for 106_AB52 letters_M109 WhiteRivBridge.docx; ProjectStudyArea_M109WhiteRivBridge.pdf

Good morning Mr. Gomez,

The consultation period for this project actually ended around 7/22/20, and I am just conducting a follow up as a courtesy. The contents for this project consultation notification were sent out to you through both certified mail (returned to us on 7/5/20 shown as unclaimed and unable to forward) and email on 6/18/20, and we have not received any responses from the Tribe as of today. Allow me to forward the email to you again below. If we do not get any responses from the tribe, the County shall considered it as no concerns from the tribe. Thank you.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

>>> Cheng Chi 6/18/2020 3:12 PM >>>
Good afternoon Mr. Gomez Jr.,

Physical copy of this project's tribal consultation has been mailed to you through certified mail this afternoon. Allow me to email these materials to you too.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

From: Cheng Chi
To: neil.peyron@tulerivertribe-nsn.gov
CC: Jessica Willis
Date: 7/29/2020 8:36 AM
Subject: Fwd: M109 White River Bridge Replacement Project_Tribal Consultation AB52 & Sec 106
Attachments: M109 WhiteRivBridge_Tule River_Peyron.doc; Project Description for 106_AB52 letters_M109 WhiteRivBridge.docx; ProjectStudyArea_M109WhiteRivBridge.pdf

Good morning Mr. Peyron,

The consultation period for this project actually ended on 7/25/20, and I am just conducting a follow up as a courtesy. The contents for this project consultation notification were sent out to you through both certified mail and email on 6/18/20, and we have not received any responses from the Tribe as of today. Allow me to forward the email to you again below. If we do not get any responses from the tribe, the County shall considered it as no concerns from the tribe. Thank you.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

>>> Cheng Chi 6/18/2020 3:15 PM >>>
Good afternoon Mr. Peyron,

Physical copy of this project's tribal consultation has been mailed to you through certified mail this afternoon. Allow me to email these materials to you too.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

From: Cheng Chi
To: tuleriverarchmon1@gmail.com
CC: Jessica Willis
Date: 7/29/2020 8:33 AM
Subject: Fwd: M109 White River Bridge Replacement Project_Tribal Consultation AB52 & Sec 106
Attachments: M109 WhiteRivBridge_Tule River_Vera.doc; Project Description for 106_AB52 letters_M109 WhiteRivBridge.docx; ProjectStudyArea_M109WhiteRivBridge.pdf

Good morning Ms. Vera,

The consultation period for this project actually ended on 7/25/20, and I am just conducting a follow up as a courtesy. The contents for this project consultation notification were sent out to you through both certified mail and email on 6/18/20, and we have not received any responses from the Tribe as of today. Allow me to forward the email to you again below. If we do not get any responses from the tribe, the County shall considered it as no concerns from the tribe. Thank you.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

>>> Cheng Chi 6/18/2020 3:18 PM >>>
Good afternoon Ms. Vera,

Physical copy of this project's tribal consultation has been mailed to you through certified mail this afternoon. Allow me to email these materials to you too.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

From: Cheng Chi
To: tuleriverarchmon1@gmail.com
CC: Jessica Willis
Date: 7/29/2020 8:27 AM
Subject: Fwd: M109 White River Bridge Replacement Project_Tribal Consultation AB52 & Sec 106
Attachments: M109 WhiteRivBridge_Tule River_Christman.doc; Project Description for 106_AB52 letters_M109 WhiteRivBridge.docx; ProjectStudyArea_M109WhiteRivBridge.pdf

Good morning Mr. Christman,

The consultation period for this project actually ended on 7/25/20, and I am just conducting a follow up as a courtesy. The contents for this project consultation notification were sent out to you through both certified mail and email on 6/18/20, and we have not received any responses from the Tribe as of today. Allow me to forward the email to you again below. If we do not get any responses from the tribe, the County shall considered it as no concerns from the tribe. Thank you.

Sincerely,

Cheng (Tim) Chi

Planner II

County Of Tulare

Resource Management Agency

5961 South Mooney Blvd.

Visalia, CA 93277

(559) 624-7086

cchi@co.tulare.ca.us

>>> Cheng Chi 6/18/2020 3:20 PM >>>

Good afternoon Mr. Christman,

Physical copy of this project's tribal consultation has been mailed to you through

certified mail this afternoon. Allow me to email these materials to you too.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

From: Cheng Chi
To: kwood8934@aol.com
CC: Jessica Willis
Date: 7/29/2020 8:24 AM
Subject: Fwd: M109 White River Bridge Replacement Project_Tribal Consultation AB52 & Sec 106
Attachments: M109 WhiteRivBridge_Wuksache_Woodrow.doc; Project Description for 106_AB52 letters_M109 WhiteRivBridge.docx; ProjectStudyArea_M109WhiteRivBridge.pdf

Good morning Mr. Woodrow,

The consultation period for this project actually ended on 7/23/20, and I am just conducting a follow up as a courtesy. The contents for this project consultation notification were sent out to you through both certified mail and email on 6/18/20, and we have not received any responses from the Tribe as of today. If we do not get any responses from the tribe, the County shall considered it as no concerns from the tribe. Thank you.

Sincerely,

Cheng (Tim) Chi

Planner II

County Of Tulare

Resource Management Agency

5961 South Mooney Blvd.

Visalia, CA 93277

(559) 624-7086

cchi@co.tulare.ca.us

>>> Cheng Chi 6/18/2020 3:24 PM >>>

Good afternoon Mr. Woodrow,

Physical copy of this project's tribal consultation has been mailed to you through certified mail this afternoon. Allow me to email these materials to you too.

Sincerely,

Cheng (Tim) Chi
Planner II
County Of Tulare
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7086
cchi@co.tulare.ca.us

Attachment "D"

Hazardous Waste Initial Site Assessment

DRAFT
HAZARDOUS WASTE
INITIAL SITE ASSESSMENT

FOR THE

M109 WHITE RIVER BRIDGE REPLACEMENT PROJECT
County of Tulare, California

Federal Project Number: BRLS-5946(170)

Prepared by:

UNICO Engineering
110 Blue Ravine Road, Suite 101
Folsom, CA 95630

Prepared for:

Tulare County Resource Management Agency
5961 S. Mooney Boulevard
Visalia, CA 93277

February 2021

Approved By: Jason Vivian Date: 2/1/2021

Jason Vivian, P.E.
(559) 624-7135
Tulare County Resource Management Agency

Summary

Tulare County (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility.

The bridge is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California. The existing bridge was constructed in 1939 and is not eligible for the National Register of Historic Places. The structure is a two-span steel girder with timber deck and asphalt over bridge structure supported on spread footings. The bridge measures approximately 40 feet in total length with a total width of 16 feet and clear width between railing of 11 feet.

The bridge is predominantly used by residents' vehicles and agricultural-related equipment and the roadway narrows to one lane of un-signalized bi-directional traffic over the bridge. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 (out of a potential 100 rating) and was flagged structurally deficient due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads.

The California Department of Transportation (Caltrans) is the lead agency under National Environmental Policy Act (NEPA). The County of Tulare (County) is the lead agency under California Environmental Quality Act (CEQA).

Based on the results of the Initial Site Assessment (ISA) evaluation, **Table 1 - Summary Table** describes evidence of the potential for Recognized Environmental Conditions (RECs) or Activity and Use Limitations (AULs) on the Subject Properties.

An Environmental Data Resources (EDR) Inc. database search was obtained on December 3, 2020. The EDR did not identify any sites within the American Society for Testing and Materials (ASTM) standard radial search of 1 mile from the project area (Appendix A). The scope of an ISA is limited to anecdotal and visual evidence of potential RECs and does not include verification of RECs based upon environmental testing. Based on the governmental records search, aerial photograph and topographic map review and visual site survey, the following actions are recommended to verify the presence/extent of RECs and evaluate the potential for remediation during the Plans, Specifications & Estimate (PS&E) phase of the M109 White River Bridge Replacement Project:

Table 1 – Summary Table

See Figure 3 for General Location	Location	Description of REC Evidence Found	Description of Associated AUL
General Project Area	Various pole- and pad-mounted electrical transformers within or immediately adjacent to the project boundaries.	Potential PCB's in pole- or pad-mounted electrical transformers. As of the date of this ISA, the existence and/or levels of PCB's associated with the pole- or pad-mounted electrical transformers, which may be encountered within the planned construction area, had not been determined.	None Found
General Project Area	Mountain Ranch Road 109	Potential lead and heavy metals associated with pavement striping. Implementation of improvements may require the removal and disposal of traffic stripe and pavement marking materials (paint, thermoplastic, permanent tape, and temporary tape). Yellow paints made prior to 1995 may exceed hazardous waste criteria under Title 22, California Code of Regulations, and require disposal in a Class I disposal site.	None Found
General Project Area	Mountain Ranch Road 109	Shoulder work along Mountain Ranch Road 109 may disturb soils with an accumulation of aerially deposited lead (ADL). If present, ADL could pose a health hazard to construction workers and impact management options for soil removal and/or placement on the site. Prior to preparation of final plans and specifications, an assessment for ADL along Mountain Ranch Road 109 may be required.	None Found
Bridge No. 46C-0133	Existing Bridge	The bridge was built in 1939, and therefore may include asbestos containing materials (ACM). Prior to structural modifications or demolition, a survey for ACM should be conducted by qualified personnel. Abatement of ACM should be conducted by contractors certified to perform such work and in accordance with state and federal regulations.	None Found.
Bridge No. 46C-0133	Existing Bridge	The bridge was built in 1939, and therefore may include lead containing paint (LCP). Prior to structural modifications or demolition, a survey for LCP should be conducted by qualified personnel. Abatement of LCP should be conducted by contractors certified to perform such work and in accordance with state and federal regulations.	None Found
Residence	Existing residence adjacent to project site	A residence is noted near the project alignment and may have associated septic systems or miscellaneous debris/hazardous materials. These potential issues should be assessed prior to any demolition.	None Found

- Based on preliminary plans, temporary construction easements will be needed within the County right-of-way and adjacent privately owned parcels throughout the length of the project. It is anticipated that right-of-way acquisitions will be required. The sites to be acquired are adjacent to the project. Should final plans indicate that a portion of these parcels will be acquired for new right-of-way, a preliminary environmental screening, to determine presence or absence, (limited subsurface sampling and laboratory analysis) should be performed for potentially elevated levels of petroleum hydrocarbons and MTBE contamination within the limits of proposed construction, and/or right-of way acquisition.

If site screening encounters elevated levels of petroleum hydrocarbons and/or MTBE, a limited Phase II Site Assessment should be performed. The Phase II Site Assessment should consist of subsurface sampling and laboratory analysis and be of sufficient quantity to define the extent and concentration of contamination within the areal extent and depths of planned construction-related activities adjacent to these sites. The Phase II Site Assessment should also provide both a Health and Safety Plan for worker safety and a Work Plan for handling and disposing contaminated soil during construction.

- The proposed project affects yellow thermoplastic pavement markings and other types of markings containing lead-based paint. Affected markings and striping as a result of the project, should be collected, tested, and/or disposed of in accordance with applicable regulations; therefore, to avoid impacts from pavement striping during construction, it is recommended that testing and removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Specifications and Standard Special Provisions for removing traffic stripes and pavement markings.
- ADL is commonly associated with transportation construction due to emissions from vehicles powered by lead gasoline. It is recommended that testing be conducted prior to excavation to determine the lead content present in soil along highways so that affected soil can be properly managed. Criteria for construction safety practices when handling lead can be found in California Code of Regulations (CCR), Title 8, Section 1532.1.
- ACM is commonly found on bridges built in 1939. It is recommended that an ACM is conducted by a Certified Asbestos Consultant (CAC) or by a Certified Site Surveillance Technician (CSST) working under a CAC. Abatement of ACM should be conducted by contractors certified to perform such work and in accordance with state and federal regulations. Waste management issues for ACM are regulated under California Code of Regulations Title 22.
- Naturally Occurring Asbestos (NOA) occurs randomly throughout Northern California in rocks and soil because of natural geological processes. Natural weathering or construction activities can disturb soil or rock that contains NOA and release the fibers into the air potentially affecting pedestrians and workers in the area. Per the Naturally Occurring Asbestos Hazard map, the M109 White River Bridge Replacement location is less likely to contain NOA, however small bodies of rock or soil with moderate or higher likelihood of asbestos presence can exist. Criteria for construction safety practices regarding NOA can be found in CCR, Title 8, Section 5208.
- Any leaking transformers observed during the project should be considered a potential polychlorinated biphenyl (PCB) hazard. A detailed inspection of individual electrical

transformers was not conducted for this ISA. However, should leaks from electrical transformers (that will either remain within the construction limits or will require removal and/or relocation) be encountered during construction-related activities, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.

- As is the case for any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during project construction-related activities. For any previously unknown hazardous waste/ material encountered during construction-related activities, the procedures outlined in Appendix B (Caltrans Unknown Hazard Procedures) shall be followed.

If the project area is anticipated to change (due to a change in the proposed project or staging area), further investigation for potentially hazardous waste generators would be required to determine their impact to the revised project limits. The project area is not anticipated to change; therefore, additional searches are not anticipated at this time for the proposed project.

I declare that to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in 40 Code of Federal Regulations, Part 312.

Cesar Montes de Oca, P.E.	RCE 74090	2/1/2021
	Professional Registration	Date

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ACRONYMS AND ABBREVIATIONS

AAI	All Appropriate Inquiries
ACM	Asbestos Containing Material
ADL	Aerially Deposited Lead
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
AUL	Activity and Use Limitation
Caltrans	California Department of Transportation
County	Tulare County
EDR	Environmental Data Resources, Inc.
FEMA	Federal Emergency Management Agency
ISA	Initial Site Assessment
LUST	Leaking Underground Storage Tank
MTBE	Methyl Tertiary Butyl Ether
NOA	Naturally Occurring Asbestos
PCB	Polychlorinated Biphenyl
REC	Recognized Environmental Condition
SR	State Route
SSP	Standard Special Provisions
SVOCs	Semi-Volatile Organic Compounds
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UST	Underground Storage Tank

1 Introduction

1.1 Project Description

Tulare County (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility.

The bridge is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California. The existing bridge was constructed in 1939 and is not eligible for the National Register of Historic Places. The structure is a two-span steel girder with timber deck and asphalt over bridge structure supported on spread footings. The bridge measures approximately 40 feet in total length with a total width of 16 feet and clear width between railing of 11 feet.

The bridge is predominantly used by residents' vehicles and agricultural-related equipment and the roadway narrows to one lane of un-signalized bi-directional traffic over the bridge. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 (out of a potential 100 rating) and was flagged structurally deficient due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads.

Temporary construction easements are needed throughout the project area and construction staging would take place within County right-of-way and adjacent privately owned parcels. Minor permanent right-of-way acquisitions are anticipated.

The total estimated cost to implement the Build Alternative is approximately $2.1 million. The project is included in the Fiscal Years 2019 Federal Transportation Improvement Program (FTIP) and is funded through the 2016/17 – 2021/22 Federal Highway Bridge Program (HBP).

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the project is to:

- Replace the existing M109 over White River Bridge with a new two-lane bridge
- Provide a structure that meets current design standards
- Provide improved safety and operations on the facility
- Provide improved access for local use of agricultural equipment

1.2.2 Need

The project is needed because the existing bridge has a sufficiency rating of 4.5 and was flagged structurally deficient due to the bridge's low load carrying capacity. The existing bridge is narrow and only capable of carrying 1 lane of traffic.

1.3 Alternatives

1.3.1 Build Alternative

The Build Alternative would replace the existing M109 bridge crossing over White River with a new two-lane bridge structure to match the required minimum width to carry two lanes of traffic. The approximate limits of the project are approximately 500 feet northwest and 300 feet southeast of the existing M109 crossing of White River. The project would conform to the existing roadway width and would provide an improved road alignment for safety. The bridge structure would consist of a concrete slab bridge. The proposed bridge would be approximately 100 feet long and would be no greater than 18 feet in height when measured from the creek bottom.

The White River channel would be graded to restore natural channel contours. Rock slope protection may be necessary around the bridge abutments for scour protection.

Temporary construction easements would be needed for bridge construction and construction staging areas. Permanent slope easements may be required to conform the finished grades of the maintenance roads along each side of the creek to the bridge profile grade. Right-of-way acquisition and utility relocations are anticipated.

M109 and driveway access would remain open during construction. Due to the length of a potential detour route, stage construction would be utilized to keep the roadway open to traffic during construction. Construction is anticipated to begin in 2024 and would take approximately 12 months to complete.

The project is subject to both California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) processes. The County is the lead agency under CEQA and Caltrans is the lead agency under NEPA.

1.3.2 No-Build Alternative

The No-Build Alternative would result in no modifications to the M109 over White River Bridge. The existing bridge at M109 over White River Road would remain functionally obsolete and structurally deficient.

1.4 Purpose of the Initial Site Assessment

This ISA was prepared in general accordance with the ISA Guideline, which is presented in the Caltrans guidance on ISA's[1]. This document is intended to be in general compliance with the US Environmental Protection Agency's "Standards and Practice for All Appropriate Inquires (AAI)"[2] and with the "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process"3.

The purpose of an ISA is to evaluate the Subject Properties for the presence of Recognized Environmental Conditions (RECs) and/or Activity and Use Limitations (AULs), which are:

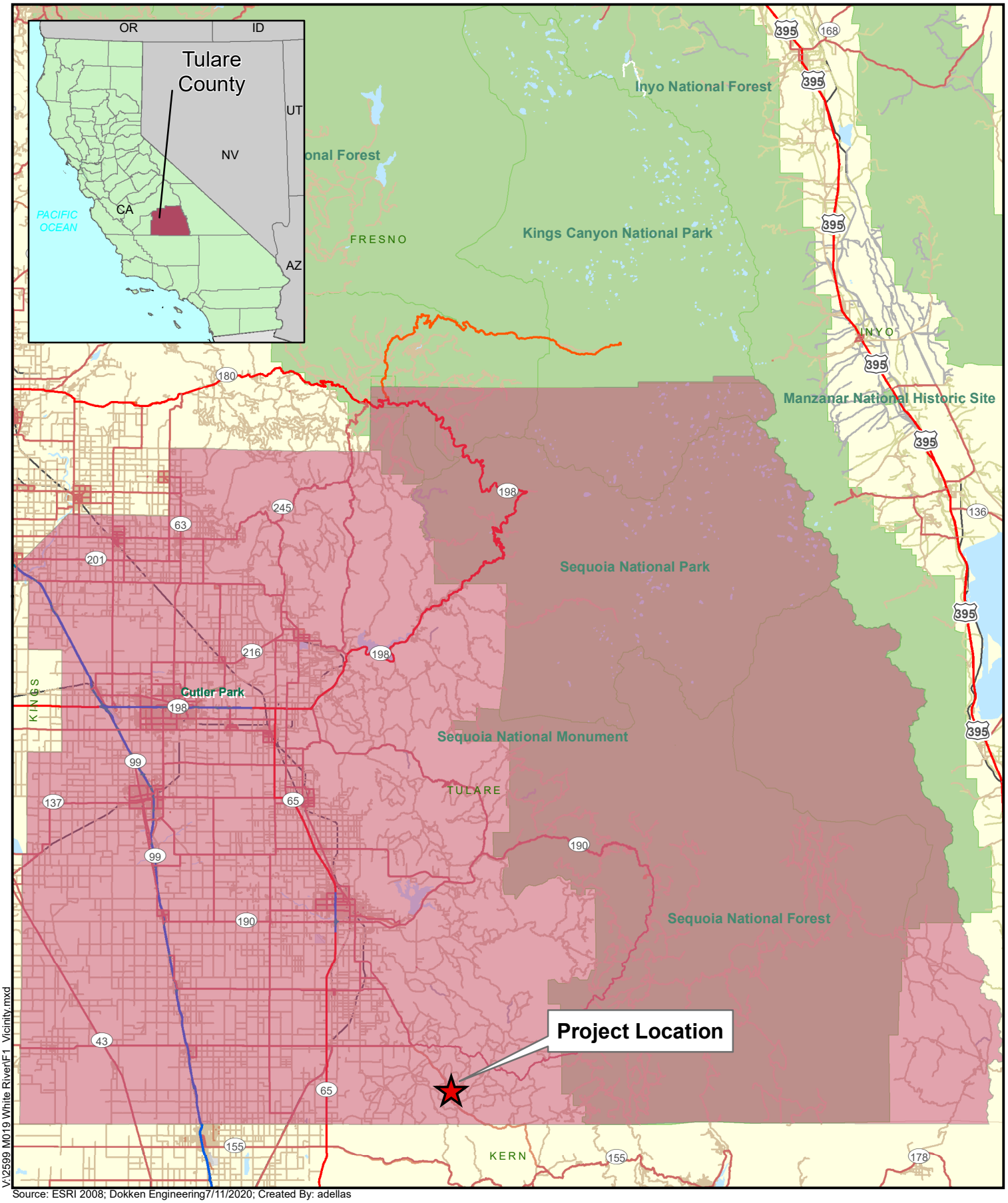
> REC: "...the presence or the likely presence of any hazardous substances or petroleum hydrocarbons on the (Subject Property) that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum hydrocarbons into structures or into the ground, groundwater, or surface water of the subject property."[3]
>
> AUL: "...legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or ground water on the property, or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment."[3]

Opinions given in this ISA report, relative to the potential for hazardous materials or petroleum hydrocarbons to exist within the project area, are based upon the information derived from the site reconnaissance conducted on November 30, 2020, and from other information sources described herein. Certain indicators of the presence of hazardous materials or petroleum hydrocarbons not readily observable during the reconnaissance may become observable later. Readily available public information sources were reviewed as providing complete and accurate information, without independent verification. The findings and conclusions in this report are based solely on the limited scope of an ISA, including information from a variety of sources. Because the scope of an ISA is necessarily limited and based in part on third party sources and significant assumptions, it is not warranted that the Subject Properties do not include hazardous material or petroleum hydrocarbon releases in areas not identified in this report.

[1] Caltrans ISA Guidance Document, 2006.

[2] 40 Code of Federal Regulations, Part 312.

[3] ASTM International E-1527-05.

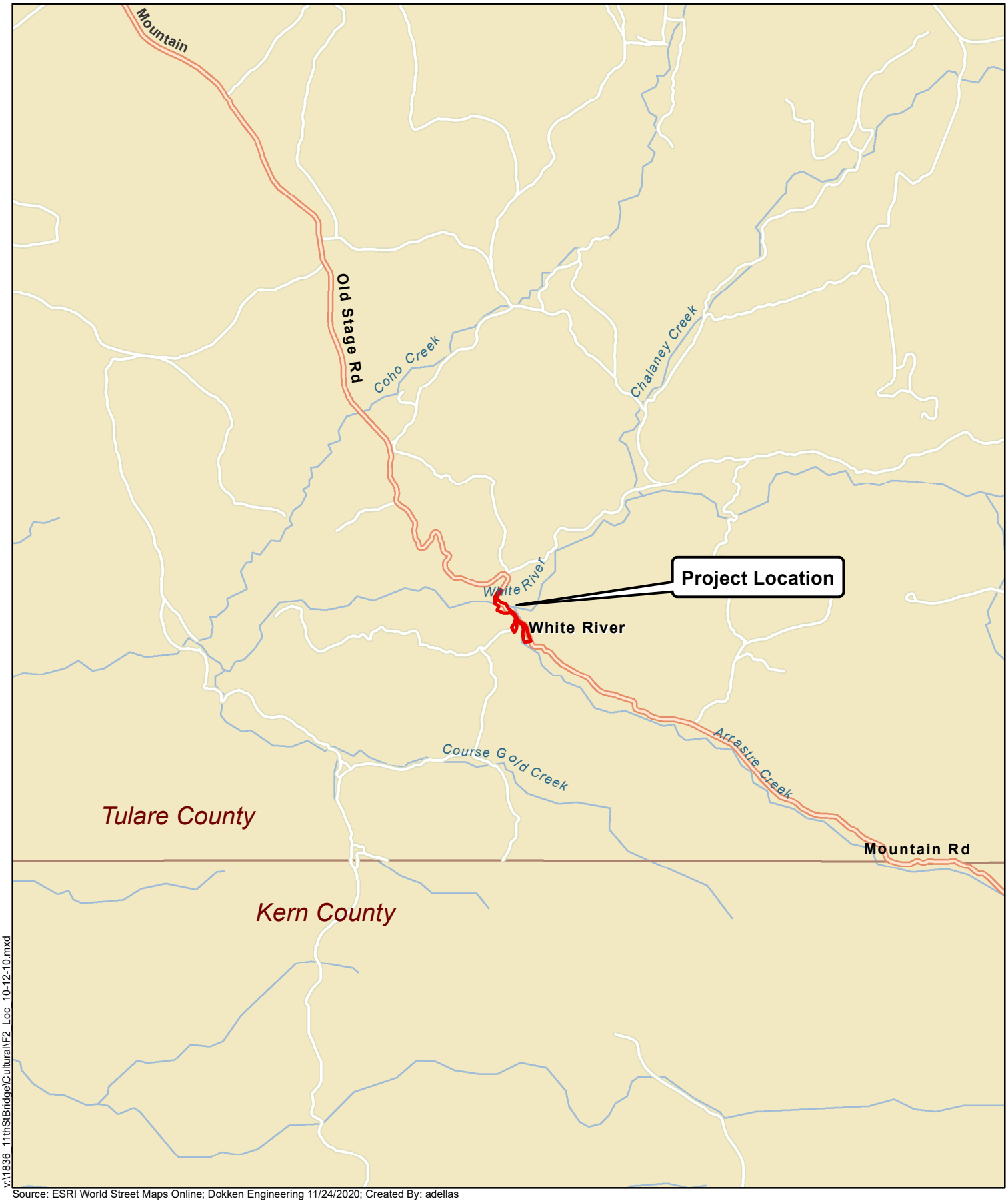


V:\2599 M019 White River\F1 Vicinity.mxd

Source: ESRI 2008; Dokken Engineering7/11/2020; Created By: adellas

0 5 10 15 Miles

FIGURE 1
Project Vicinity
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California



v:\1836_11thStBridge\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 11/24/2020; Created By: adellas

0 0.5 1 1.5 2 Miles

FIGURE 2
Project Location
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California

2 Description and Location

The project proposes to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure. The bridge is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California. The project area includes portions of the parcels listed in Table 2 below.

Table 2 – Summary Table

Assessor's Parcel Number	Property Identification/ Zoned For	Project Requires		
		Land Acquisition	Temporary Construction Easement	Encroachment Permit
344-030-002	Arbelo Trina / Residential	☐	☒	☐
344-030-004	Cojo Ranch LP / Agricultural	☐	☒	☐
344-030-005	Hutton Dennis / Miscellaneous	☐	☒	☐

2.1 Topography/Geology

The project area is located approximately between 1,080 feet to 1,150 feet above mean sea level along the White River. It is located west of Bald Mountain. The sediments covering the site area appear to be Plutonic and Intrusive Rocks of the Mesozoic era. Soil within the Project impact area consists of Blasingame sandy loam, 15 to 30 percent slopes (24.3%), Blasingame sandy loam, 30 to 50 percent slopes (57.1%), and Cieneba-Rock outcrop complex, 15 to 75 percent slopes (18.6%).

2.2 Current Land Use

The land use in the surrounding area is primarily undisturbed coniferous forest. According to Tulare County Zoning maps, the parcels adjacent to the Project are zoned as Foothill-Agricultural.

The project area is owned by Tulare County and will require temporary construction easements as well as permanent right of way acquisition.

2.3 Surface Water

Natural drainage at the site tend to sheet flows from Bald Mountain into the White River and its tributaries. The White River then flows to the northwest and west.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map shows the project to be in Zone A, which is defined as an area outside the 1% annual chance floodplain (Appendix C).

3 Property Information

Three parcels are associated with the M109 Whiter River Bridge Replacement Project. The intended use of the subject properties includes existing County right-of-way and privately owned parcels. The project area will require temporary easements, but minimal permanent right-of-way acquisitions are anticipated. A property appraisal of the subject properties was beyond the scope of this ISA.

4 Records Review

The following required public records as defined in Table 3 of the Caltrans ISA Guidance Document[4] were reviewed:

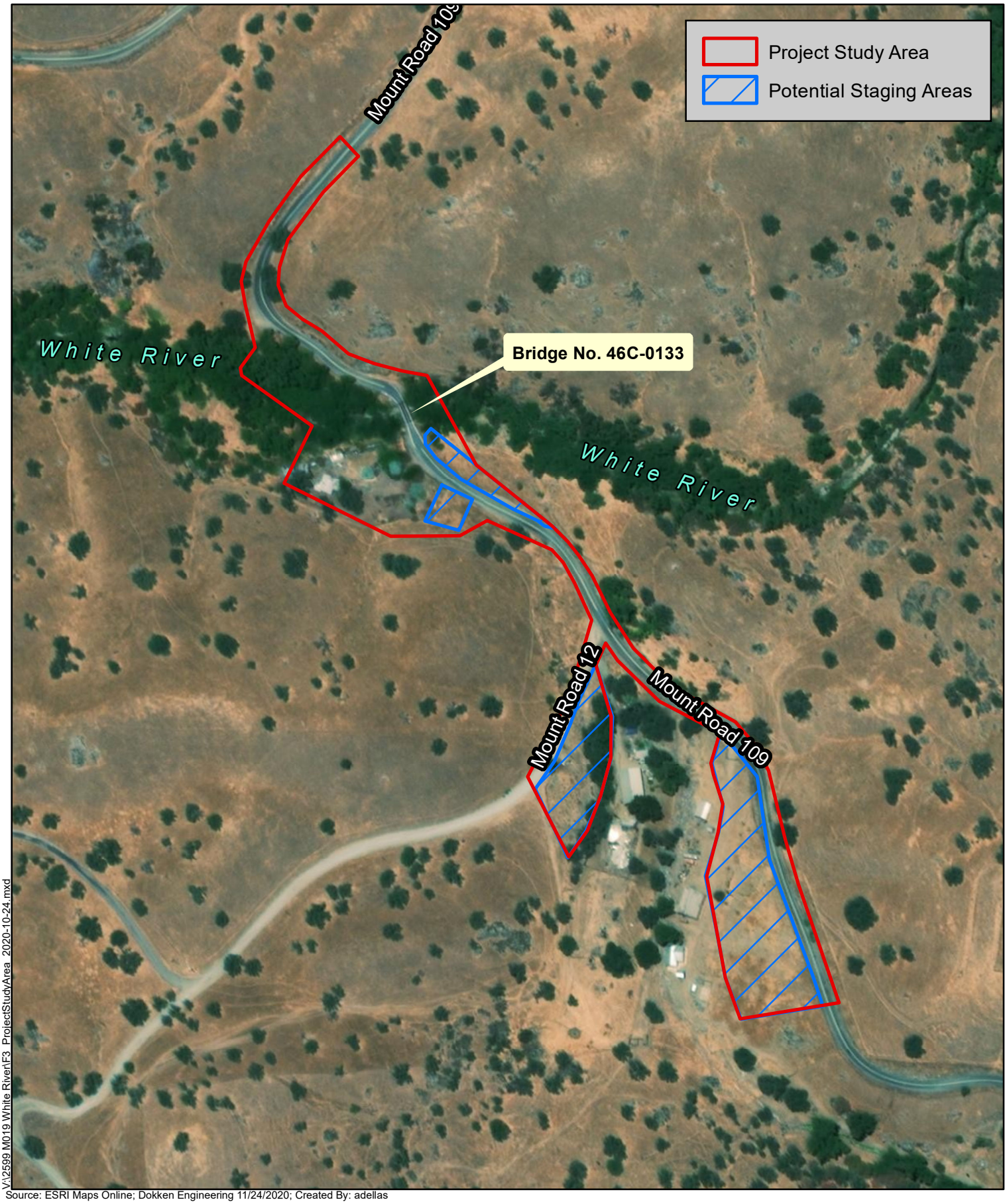
Table 3 – Reviewed Public Records

Standard Environmental Record Sources	Standard Environmental Record Sources Approximate Minimum Search Distance (miles)
Federal NPL site list	1.0
Federal Delisted NPL site list	0.5
Federal CERCLIS list	0.5
Federal CERCLIS NFRAP site list	0.5
Federal RCRA CORRACTS facilities list	1.0
Federal RCRA non-CORRACTS TSD facilities list	0.5
Federal RCRA generators list	property and adjoining properties
Federal institutional control/engineering control registries	property only
Federal ERNS list	property only
State and tribal-equivalent NPL	1.0
State and tribal-equivalent CERCLIS	0.5
State and tribal landfill and/or solid waste disposal site lists	0.5
State and tribal leaking storage tank lists	0.5
State and tribal registered storage tank lists	property and adjoining properties
State and tribal institutional control/engineering control registries	property only
State and tribal voluntary cleanup sites	0.5
State and tribal Brownfield sites	0.5

4.1 Government Records Search

A summary of the published lists of known hazardous substance sites was provided by Environmental Data Resources, Inc. (EDR) and a copy of the EDR Radius Report is included in Appendix A. EDR reviewed standard federal, state, and local listings of known sites and identified 0 (zero) sites within 1 mile of the project area. Based on site observations and review of the database records search, no HRECs were identified within the project area. No further investigation is necessary at this time.

[4] Caltrans ISA Guidance Document, Table 3, 2006.



V:\2599 M019 White River\F3 ProjectStudyArea 2020-10-24.mxd

Source: ESRI Maps Online; Dokken Engineering 11/24/2020; Created By: adellas

0 100 200 300 400 500 Feet

FIGURE 3
Project Study Area
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California

4.2 Historic Topographic Maps

We obtained the 1943 United States Geological Survey (USGS) 30-minute Tobias Peak quadrangles, the 1946 and 1952 USGS 15-minute White River quadrangles, and the 1936, 1965, 1973, and 2012 USG 7.5-minute White River quadrangles from EDR (see appendix A [EDR Historical Topographic Map Report]). A review of the maps is listed below:

- 1936 7.5-minute White River map shows the area mostly open and undeveloped.
- 1946 15-minute White River map show the presence of a roadway and the river crossing.
- 1952 15-minute White River map show the presence of Mountain Road 109, the river crossing, and buildings at the adjacent properties.
- 1965, 1973 and 2012 7.5-minute White River map shows the presence of Mountain Road 109 and the river crossing.

Table 4 – Property Features

Feature	On Subject Properties?	On Adjacent Properties?
Roads/Pavement	☒	☒
Railroad Tracks	☐	☒
Buildings	☐	☒
Wells	☐	☐
Tanks	☐	☐
Man-made Lakes and Levees	☐	☐
Streams/Rivers/Coastal Features	☒	☒
Landfills/Disposal Operations	☐	☐
Mines/Tailing Piles/Mine Dump	☐	☐
Wetlands (Marsh/Swamp/Bog)	☐	☐
Vegetation	☒	☒

4.3 Non-Standard Source Review

The Caltrans ISA guidance identifies other non-standard sources that may be reviewed at the discretion of the Environmental Professional. Caltrans indicates that the Environmental Professional may elect to review non-standard sources to identify the first obvious developed use of the Subject Property and to characterize the physical setting of the project area. The non-standard sources that were reviewed for this ISA are shown in Table 5.

Table 5 – Non-Standard Sources

Non-Standard Source	Reviewed for this ISA	Source Reference
Historical Aerial Photographs	☐	
Fire Insurance Maps	☐	
Local Street Directories	☐	
Soil Surveys	☐	
Geologic Maps	☐	
Oil and Gas Production Maps	☐	
Naturally - Occurring Asbestos Maps	☐	
Groundwater Maps	☐	
Groundwater Databases	☐	
Building Department Records	☐	
Zoning/Land Use Records	☐	
Historical Society Records	☐	
Personal Interviews	☐	
Regulatory Agency Files	☐	
Other (describe):	☒	Department of Toxic Substances Control, EnviroStor Database; State of California Regional Water Quality Control Board, Geotracker Database; FEMA's National Flood Hazard Layer

4.3.1 Sanborn Fire Insurance Maps

A search of the Sanborn Map files by EDR indicated that no fire insurance maps of the subject project area were available.

4.3.2 Naturally Occurring Asbestos Maps

Naturally Occurring Asbestos (NOA) can occur in serpentine rock. The most common forms of NOA minerals are chrysotile, actinolite, and tremolite. A review of the "General Location Guide for Ultramafic Rocks in California – Areas likely to Contain Naturally Occurring Asbestos" (CGS Open-file Report 2000-19, 2000) indicated that NOA was not mapped on, or in the near vicinity of the project area.

4.3.3 Groundwater Data Information

The groundwater in the general vicinity of the project area tends to flow in in a westerly direction towards the San Joaquin Valley -Kaweah Basin. Groundwater tends to flow along the relatively shallow bedrock. The proposed improvements will be designed to have a negligible effect on the existing groundwater table. Groundwater was encountered at approximate elevation of 1,065 feet during the geotechnical investigation performed on December 7, 2020 and is strongly influenced by the water levels in the White River. It is anticipated that the proposed bridge replacement foundations and excavations will extend below the depth of groundwater.

4.3.4 Department of Toxic Substances Control, EnviroStor Database

A review of the Department of Toxic Substances Control EnviroStor Database indicated that there were no sites on or near the project area that were not already included in the record search by EDR.

4.3.5 State of California Regional Water Quality Control Board, Geotracker Database

Geotracker is a geographic information system (GIS) tool that provides on-line access to environmental data. Geotracker is the interface to the Geographic Environmental Information Management System (GEIMS), a data warehouse that tracks regulatory data on underground fuel tanks, fuel pipelines, and public drinking water supplies. Geo Tracker and GEIMS were developed pursuant to a mandate by the California State Legislature (AB 592, SB 1189) to investigate the feasibility of establishing a statewide GIS for LUST sites. Geo Tracker contains well, tank, and pipeline data from all of California.

A review of the Geotracker Database indicated that there were no sites on or near the project area listed on the Geotracker Database that were not already included in the record search by EDR.

5 Reconnaissance of the Subject Properties and Vicinity

Cesar Montes de Oca, P.E., conducted the reconnaissance on November 30, 2020. The weather that day was clear skies in the morning, which did not limit the observations of potential REC's.

An ISA project area map, which includes the properties observed during the site reconnaissance, is included in Figure 3. A copy of the Caltrans ISA Checklist is presented in Appendix D and photographs documenting the reconnaissance are included in Appendix E.

Mr. Montes de Oca walked all accessible areas within the project boundaries to look for evidence of RECs and structures that may include asbestos containing material (ACMs). Based on the reconnaissance, Table 6 summarizes the observations of the Subject Properties within the project area.

Table 6 – Subject Property Observations

Observation	Observed on Subject Properties	ISA Parcel Number Designation(s)
Bare Soil with Stains	☐	
Soil Stockpile or Imported Fill	☐	
Pavement with Stains	☐	
Loading Docks	☐	
Rail Line/Spur	☐	
Hazardous Materials Storage	☐	
Petroleum Hydrocarbon Storage	☐	
Aboveground Tanks	☐	
Underground Tanks	☐	
Solid Waste Storage	☐	
Liquid Waste Storage	☐	
Air Emission Controls	☐	
On-Site Disposal (non-sewage)	☐	
On-Site Sewage Disposal	☐	
Municipal Water Supply Connection	☐	
Domestic Well	☐	
Industrial Well	☐	
Agricultural Well	☒	Properties adjacent to the site
Groundwater Monitoring Well	☐	
Odor	☐	
Building with Potential for Asbestos or Lead Based Paint	☒	Existing Bridge
Bridge with Potential ACM's or Lead Based Paint	☒	Existing Bridge
Other (describe): Potential PCB's associated with pad and pole-mounted electrical transformers;	☒	General Project Area
Other (describe): Occasional surface litter and construction debris.	☒	General Project Area

Based on the site reconnaissance potential REC's within the project boundaries includes occasional surface litter and construction debris.

Based on the reconnaissance, Table 7 summarizes the observations of properties adjacent to the Subject Properties:

Table 7 – Adjacent Property Observations

Observation	Observed on Adjacent Property	ISA Parcel Number Designation(s)
Bare Soil with Stains	☐	
Soil Stockpile or Imported Fill	☐	
Pavement with Stains	☐	
Loading Docks	☐	
Rail Line/Spur	☐	
Hazardous Materials Storage	☐	
Petroleum Hydrocarbon Storage	☐	
Aboveground Tanks	☐	
Underground Tanks	☐	
Solid Waste Storage	☐	
Liquid Waste Storage	☐	
Air Emission Controls	☐	
On-Site Disposal (non-sewage)	☐	
On-Site Sewage Disposal	☐	
Municipal Water Supply Connection	☐	
Domestic Well	☐	
Industrial Well	☐	
Agricultural Well	☐	
Groundwater Monitoring Well	☐	
Odor	☐	
Building with Potential for Asbestos or Lead Based Paint	☐	
Bridge with Potential ACM's or Lead Based Paint	☐	
Other (describe): Pavement striping on existing roadways.	☒	General Project Area
Other (describe): Potential PCB's associated with pad and pole-mounted electrical transformers.	☒	General Project Area
Other (describe): Occasional surface litter and construction debris.	☒	General Project Area
Other (describe): Water pump facility.	☐	

Based on the site reconnaissance, potential REC's on properties adjacent to the project boundaries include the following:

- Lead and heavy metals associated with the pavement striping of Mountain Road 109;
- Potential PCB's associated with pad and pole-mounted electrical transformers;
- Occasional surface litter and construction debris; and
- A potentially septic systems or wells.

6 Initial Site Assessment Findings and Conclusions

This report presents results of the ISA for property associated with the M109 White River Bridge Replacement Project. This ISA was prepared in general accordance with the Caltrans ISA Guidance Document. Based on this ISA, no evidence of RECs or AULs within the project boundaries were found, except those described in Table 8.

Table 8 – REC or AUL Evidence

See Figure 3 for General Location	Location	Description of REC Evidence Found	Description of Associated AUL
General Project Area	Various pole- and pad-mounted electrical transformers within or immediately adjacent to the project boundaries.	Potential PCB's in pole- or pad-mounted electrical transformers. As of the date of this ISA, the existence and/or levels of PCB's associated with the pole- or pad-mounted electrical transformers, which may be encountered within the planned construction area, had not been determined.	None Found
General Project Area	Mountain Ranch Road 109	Potential lead and heavy metals associated with pavement striping. Implementation of improvements may require the removal and disposal of traffic stripe and pavement marking materials (paint, thermoplastic, permanent tape, and temporary tape). Yellow paints made prior to 1995 may exceed hazardous waste criteria under Title 22, California Code of Regulations, and require disposal in a Class I disposal site.	None Found
General Project Area	Mountain Ranch Road 109	Shoulder work along Mountain Ranch Road 109 may disturb soils with an accumulation of aerially deposited lead (ADL). If present, ADL could pose a health hazard to construction workers and impact management options for soil removal and/or placement on the site. Prior to preparation of final plans and specifications, an assessment for ADL along Mountain Ranch Road 109 may be required.	None Found
Bridge No. 46C-0133	Existing Bridge	The bridge was built in 1939, and therefore may include asbestos containing materials (ACM). Prior to structural modifications or demolition, a survey for ACM should be conducted by qualified personnel. Abatement of ACM should be conducted by contractors certified to perform such work and in accordance with state and federal regulations.	None Found.
Bridge No. 46C-0133	Existing Bridge	The bridge was built in 1939, and therefore may include lead containing paint (LCP). Prior to structural modifications or demolition, a survey for LCP should be conducted by qualified personnel. Abatement of LCP should be conducted by contractors certified to perform such work and in accordance with state and federal regulations.	None Found
Residence	Existing residence adjacent to project site	A residence is noted near the project alignment and may have associated septic systems, wells, or miscellaneous debris/hazardous materials. These potential issues should be assessed prior to any demolition.	None Found

7 Recommendations

The scope of an ISA is limited to anecdotal and visual evidence of potential RECs and does not include verification of RECs based upon environmental testing. Based on the governmental records search, aerial photograph and topographic map review and visual site survey, the following actions are recommended to verify the presence/extent of RECs and evaluate the potential for remediation during the Plans, Specifications & Estimate (PS&E) phase of the Project:

- Based on preliminary plans, temporary construction easements will be needed within the County right-of-way and adjacent privately owned parcels throughout the length of the project. It is anticipated that right-of-way acquisitions will be required. The sites to be acquired are adjacent to the project. Should final plans indicate that a portion of these parcels will be acquired for new right-of-way, a preliminary environmental screening, to determine presence or absence, (limited subsurface sampling and laboratory analysis) should be performed for potentially elevated levels of petroleum hydrocarbons and MTBE contamination within the limits of proposed construction, and/or right-of way acquisition. If site screening encounters elevated levels of petroleum hydrocarbons and/or MTBE, a limited Phase II Site Assessment should be performed. The Phase II Site Assessment should consist of subsurface sampling and laboratory analysis and be of sufficient quantity to define the extent and concentration of contamination within the areal extent and depths of planned construction-related activities adjacent to these sites. The Phase II Site Assessment should also provide both a Health and Safety Plan for worker safety and a Work Plan for handling and disposing contaminated soil during construction.
- The proposed project affects yellow thermoplastic pavement markings and other types of markings containing lead-based paint. Affected markings and striping as a result of the project, should be collected, tested, and/or disposed of in accordance with applicable regulations; therefore, to avoid impacts from pavement striping during construction, it is recommended that testing and removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Specifications and Standard Special Provisions for removing traffic stripes and pavement markings.
- ADL is commonly associated with transportation construction due to emissions from vehicles powered by lead gasoline. It is recommended that testing be conducted prior to excavation to determine the lead content present in soil along highways so that affected soil can be properly managed. Criteria for construction safety practices when handling lead can be found in California Code of Regulations (CCR), Title 8, Section 1532.1.
- ACM is commonly found on bridges built in 1939. It is recommended that an ACM is conducted by a Certified Asbestos Consultant (CAC) or by a Certified Site Surveillance

Technician (CSST) working under a CAC. Abatement of ACM should be conducted by contractors certified to perform such work and in accordance with state and federal regulations. Waste management issues for ACM are regulated under California Code of Regulations Title 22.

- Naturally Occurring Asbestos (NOA) occurs randomly throughout Northern California in rocks and soil because of natural geological processes. Natural weathering or construction activities can disturb soil or rock that contains NOA and release the fibers into the air potentially affecting pedestrians and workers in the area. Per the Naturally Occurring Asbestos Hazard map, the M109 White River Bridge Replacement location is less likely to contain NOA, however small bodies of rock or soil with moderate or higher likelihood of asbestos presence can exist. Criteria for construction safety practices regarding NOA can be found in CCR, Title 8, Section 5208.
- Any leaking transformers observed during the project should be considered a potential polychlorinated biphenyl (PCB) hazard. A detailed inspection of individual electrical transformers was not conducted for this ISA. However, should leaks from electrical transformers (that will either remain within the construction limits or will require removal and/or relocation) be encountered during construction-related activities, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.
- As is the case for any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during project construction-related activities. For any previously unknown hazardous waste/ material encountered during construction-related activities, the procedures outlined in Appendix B (Caltrans Unknown Hazard Procedures) shall be followed.

If the project area is anticipated to change (due to a change in the proposed project or staging area), further investigation for potential hazardous waste generators would be required to determine their impact to the revised project limits. The project area is not anticipated to change; therefore, additional searches are not anticipated at this time for the proposed project.

8 Limitations

The ISA for the M109 White River Bridge Replacement Project located in Tulare County, California, was performed in general accordance with the Caltrans procedures and guidelines for performing and preparing ISA's. During the performance of the assessment, all readily available materials pertaining to the project area were collected and reviewed to prepare this document. This assessment is not a full-scale environmental site investigation to prove that the project area is environmentally devoid of hazardous or toxic materials. Information and data were provided by presumably competent third parties with knowledge about the site and surrounding areas. The presence of radioactive materials and biological hazards was not specifically investigated.

This ISA consists of professional opinions and recommendations made in accordance with generally accepted environmental principles and practices. The conclusions are based upon an evaluation of the information gathered and general observations of conditions prevalent at the project site during the site visit. This ISA does not otherwise provide any implied or expressed guarantees regarding the characteristics or conditions of environmental media in the project area.

APPENDIX A

EDR Records Review

M109 Over White River
Mountain Road 109
Posey, CA 93260

Inquiry Number: 6288863.2s
December 03, 2020

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

MOUNTAIN ROAD 109
POSEY, CA 93260

COORDINATES

Latitude (North):	35.8132500 - 35° 48' 47.70''
Longitude (West):	118.8455270 - 118° 50' 43.89''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	333262.7
UTM Y (Meters):	3964607.2
Elevation:	1066 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5638976 WHITE RIVER, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140617
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
MOUNTAIN ROAD 109
POSEY, CA 93260

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROLS..... Institutional Controls Sites List

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State- and tribal - equivalent CERCLIS

ENVIROSTOR..... EnviroStor Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

LUST..... Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC..... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
UST..... Active UST Facilities
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

ODI	Open Dump Inventory
IHS OPEN DUMPS	Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL	Delisted National Clandestine Laboratory Register
HIST Cal-Sites	Historical Calsites Database
SCH	School Property Evaluation Program
CDL	Clandestine Drug Labs
Toxic Pits	Toxic Pits Cleanup Act Sites
CERS HAZ WASTE	CERS HAZ WASTE
US CDL	National Clandestine Laboratory Register
PFAS	PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

SWEEPS UST	SWEEPS UST Listing
HIST UST	Hazardous Substance Storage Container Database
CA FID UST	Facility Inventory Database
CERS TANKS	California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

EXECUTIVE SUMMARY

MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
ECHO	Enforcement & Compliance History Information
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
HIST CORTESE	Hazardous Waste & Substance Site List
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify 65	Proposition 65 Records
UIC	UIC Listing
UIC GEO	UIC GEO (GEOTRACKER)
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List
MILITARY PRIV SITES	MILITARY PRIV SITES (GEOTRACKER)
PROJECT	PROJECT (GEOTRACKER)
WDR	Waste Discharge Requirements Listing
CIWQS	California Integrated Water Quality System
CERS	CERS
NON-CASE INFO	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)
HWTS	Hazardous Waste Tracking System
MINES MRDS	Mineral Resources Data System

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---------- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---------- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---------- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were not identified.

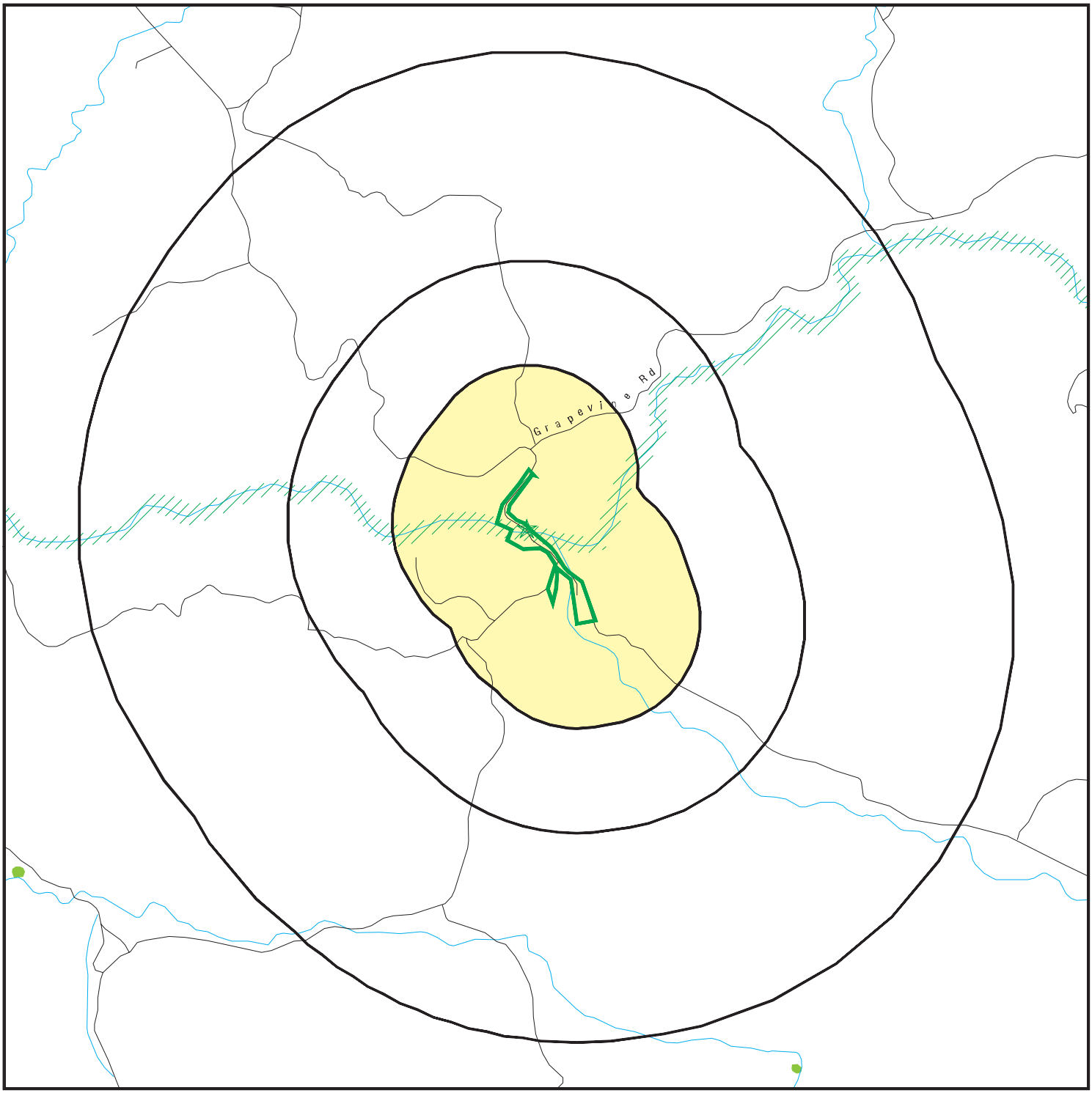
Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
M109 OVER WHITE RIVER BRIDGE REPLA	CIWQS

OVERVIEW MAP - 6288863.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

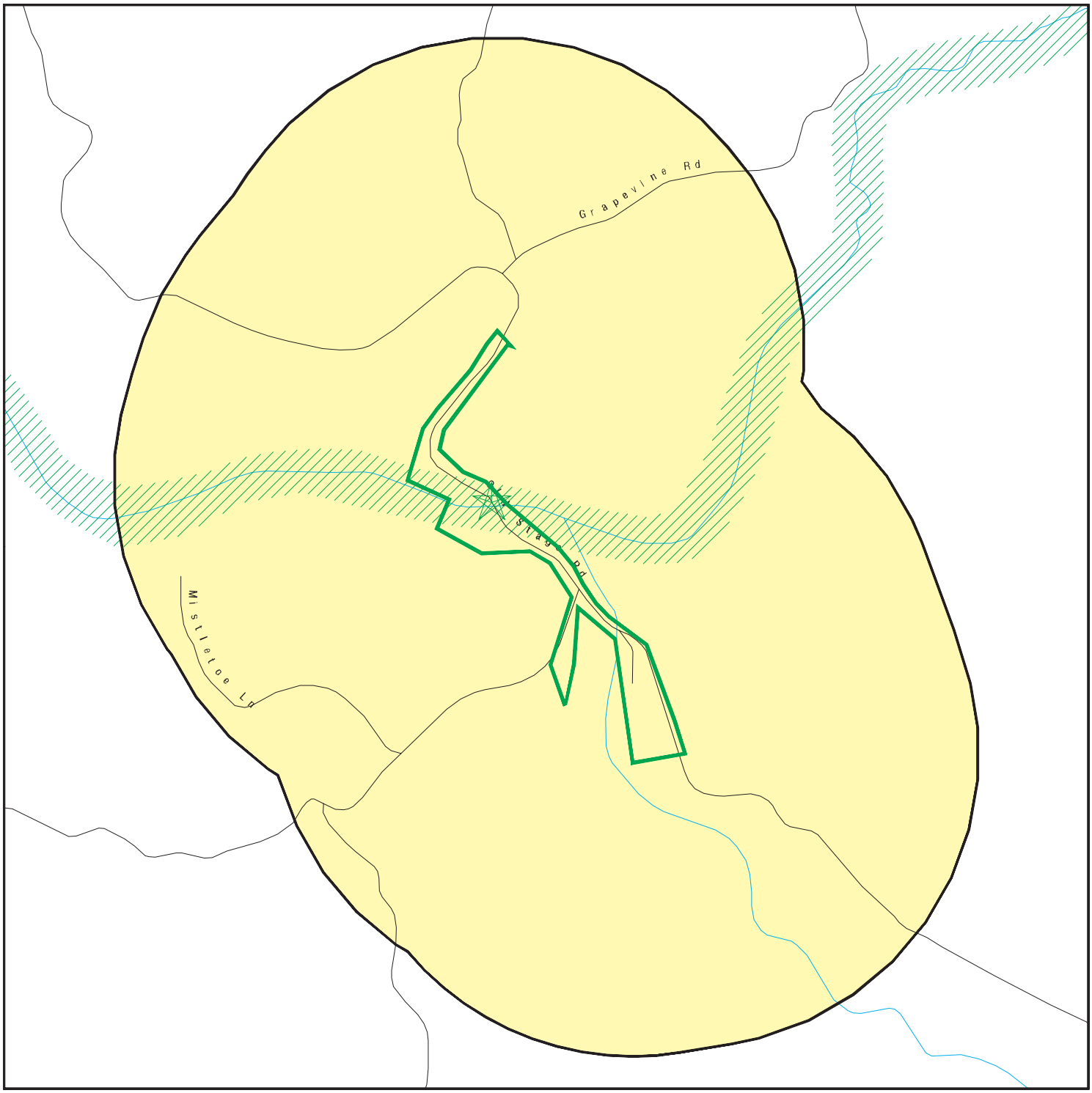
Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	M109 Over White River	CLIENT:	Dokken Engineering
ADDRESS:	Mountain Road 109 Posey CA 93260	CONTACT:	Andrew Dellas
LAT/LONG:	35.81325 / 118.845527	INQUIRY #:	6288863.2s
		DATE:	December 03, 2020 3:58 pm

DETAIL MAP - 6288863.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	M109 Over White River	CLIENT:	Dokken Engineering
ADDRESS:	Mountain Road 109 Posey CA 93260	CONTACT:	Andrew Dellas
		INQUIRY #:	6288863.2s
LAT/LONG:	35.81325 / 118.845527	DATE:	December 03, 2020 3:58 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	0	0	0	0	0	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number

NO SITES FOUND

Count: 1 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
POSEY	S126417587	M109 OVER WHITE RIVER BRIDGE REPLA	OLD STAGE COACH	93260	CIWQS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: EPA
Telephone: N/A
Last EDR Contact: 12/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: EPA
Telephone: N/A
Last EDR Contact: 12/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: EPA
Telephone: N/A
Last EDR Contact: 12/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/02/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/02/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 87

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/11/2020
Number of Days to Update: 82

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/18/2020
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/18/2020
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 87

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/11/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 11/10/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/29/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/26/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 78

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/15/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 07/21/2020
Date Data Arrived at EDR: 09/03/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 83

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 05/26/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72
Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/03/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/26/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 78

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/29/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/04/2020
Number of Days to Update: 74

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 05/29/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 75

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 10/30/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2019
Date Data Arrived at EDR: 05/28/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 12/01/2020
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 05/20/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/06/2020
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/26/2020
Date Data Arrived at EDR: 08/28/2020
Date Made Active in Reports: 11/17/2020
Number of Days to Update: 81

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 12/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 08/31/2020
Date Data Arrived at EDR: 08/31/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 81

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 12/01/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/23/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 86

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 08/05/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/21/2020
Number of Days to Update: 69

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 11/17/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/08/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 11/09/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 11/02/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 11/06/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/18/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/17/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 79

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 12/02/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 07/24/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/21/2020
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/14/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 34

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 12/02/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019
Date Data Arrived at EDR: 10/11/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 70

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/05/2020
Date Data Arrived at EDR: 08/10/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 59

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 01/31/2021
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 42
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 12/01/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 11/30/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 11/06/2021
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 09/24/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/27/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/15/2020
Date Made Active in Reports: 07/21/2020
Number of Days to Update: 6

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 151

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 11/06/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/20/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 12/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data
Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 09/10/2020
Date Data Arrived at EDR: 09/15/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 66

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 11/24/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Quarterly

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/04/2020
Date Data Arrived at EDR: 08/25/2020
Date Made Active in Reports: 11/18/2020
Number of Days to Update: 85

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/25/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/25/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 80

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 12/01/2020
Next Scheduled EDR Contact: 03/22/2021
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 09/04/2020
Date Data Arrived at EDR: 09/15/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 66

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 12/01/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/27/2020
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/28/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 11/17/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites
A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77
Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/08/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/17/2020
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 10/21/2020
Number of Days to Update: 65
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 11/13/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/04/2020
Number of Days to Update: 74
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 11/13/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 08/19/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 09/04/2020
Number of Days to Update: 14

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 08/25/2020
Date Data Arrived at EDR: 08/26/2020
Date Made Active in Reports: 11/13/2020
Number of Days to Update: 79

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/28/2020
Date Made Active in Reports: 11/17/2020
Number of Days to Update: 81

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 06/16/2020
Date Made Active in Reports: 08/28/2020
Number of Days to Update: 73

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/18/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/05/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 79

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 11/04/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/05/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/17/2020
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 11/05/2020
Number of Days to Update: 80

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 11/13/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/17/2020
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 11/05/2020
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/13/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/06/2020
Date Data Arrived at EDR: 07/07/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 08/31/2020
Date Data Arrived at EDR: 08/31/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 81
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 12/01/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/10/2020
Date Made Active in Reports: 10/29/2020
Number of Days to Update: 80
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 11/09/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 08/31/2020
Date Data Arrived at EDR: 08/31/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 81
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 12/01/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 12/01/2020
Number of Days to Update: 84
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 08/21/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 08/27/2020
Number of Days to Update: 6
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 08/20/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 12/01/2020
Number of Days to Update: 84

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/09/2020
Number of Days to Update: 62

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 11/13/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 12/01/2020
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 08/31/2020
Date Data Arrived at EDR: 08/31/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 81

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 12/01/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 83
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55
Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29
Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 11/25/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 10/13/2020
Date Data Arrived at EDR: 10/14/2020
Date Made Active in Reports: 11/03/2020
Number of Days to Update: 20

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/01/2020
Date Made Active in Reports: 07/17/2020
Number of Days to Update: 16

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 06/01/2020
Number of Days to Update: 13

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/17/2020
Date Data Arrived at EDR: 06/18/2020
Date Made Active in Reports: 09/02/2020
Number of Days to Update: 76

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 07/16/2020
Date Data Arrived at EDR: 07/22/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 78

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 70

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/13/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 70

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/01/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 78

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/13/2020
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 11/05/2020
Number of Days to Update: 80

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/13/2020
Number of Days to Update: 75

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/14/2020
Number of Days to Update: 76

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/11/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 11/20/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 08/13/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 71

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/06/2020
Date Data Arrived at EDR: 07/10/2020
Date Made Active in Reports: 09/28/2020
Number of Days to Update: 80

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/13/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 78

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 11/05/2020
Number of Days to Update: 80

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 42
Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 10/12/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/25/2020
Date Data Arrived at EDR: 04/14/2020
Date Made Active in Reports: 07/01/2020
Number of Days to Update: 78
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/02/2019
Number of Days to Update: 64

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/05/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 1

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 08/20/2020
Date Data Arrived at EDR: 08/24/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 77

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 11/15/2020
Next Scheduled EDR Contact: 03/08/3021
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/15/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 16

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/13/2020
Number of Days to Update: 75

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 06/10/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/19/2020
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/02/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/02/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 79

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/02/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/01/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/19/2020
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/03/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 11/24/2020
Date Data Arrived at EDR: 11/24/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 1

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/06/2020
Date Data Arrived at EDR: 10/07/2020
Date Made Active in Reports: 11/03/2020
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 10/06/2020
Date Data Arrived at EDR: 10/07/2020
Date Made Active in Reports: 11/03/2020
Number of Days to Update: 27
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/24/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/17/2020
Number of Days to Update: 78
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 08/04/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78
Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 08/04/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 82
Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 08/31/2020
Date Data Arrived at EDR: 08/31/2020
Date Made Active in Reports: 11/23/2020
Number of Days to Update: 84

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 12/01/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 82

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 75

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/11/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/01/2020
Next Scheduled EDR Contact: 03/22/2021
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 08/20/2020
Date Data Arrived at EDR: 08/20/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 81

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 07/30/2020
Date Data Arrived at EDR: 07/31/2020
Date Made Active in Reports: 10/16/2020
Number of Days to Update: 77

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 08/25/2020
Date Data Arrived at EDR: 08/26/2020
Date Made Active in Reports: 09/16/2020
Number of Days to Update: 21

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/07/2020
Date Data Arrived at EDR: 07/08/2020
Date Made Active in Reports: 09/25/2020
Number of Days to Update: 79

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/01/2020
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/04/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 08/25/2020
Date Data Arrived at EDR: 08/26/2020
Date Made Active in Reports: 11/17/2020
Number of Days to Update: 83

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 08/11/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 75

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/06/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 81

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 07/10/2020
Date Data Arrived at EDR: 07/22/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 78

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 07/10/2020
Date Data Arrived at EDR: 07/22/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 77

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/26/2020
Date Data Arrived at EDR: 09/08/2020
Date Made Active in Reports: 12/01/2020
Number of Days to Update: 84

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/23/2020
Date Data Arrived at EDR: 06/29/2020
Date Made Active in Reports: 09/15/2020
Number of Days to Update: 78

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/07/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 80

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 11/03/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 10/20/2020
Date Made Active in Reports: 11/02/2020
Number of Days to Update: 13

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/09/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 10/30/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 10/02/2019
Date Made Active in Reports: 12/10/2019
Number of Days to Update: 69

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/02/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

M109 OVER WHITE RIVER
MOUNTAIN ROAD 109
POSEY, CA 93260

TARGET PROPERTY COORDINATES

Latitude (North):	35.81325 - 35° 48' 47.70''
Longitude (West):	118.845527 - 118° 50' 43.90''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	333262.7
UTM Y (Meters):	3964607.2
Elevation:	1066 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5638976 WHITE RIVER, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

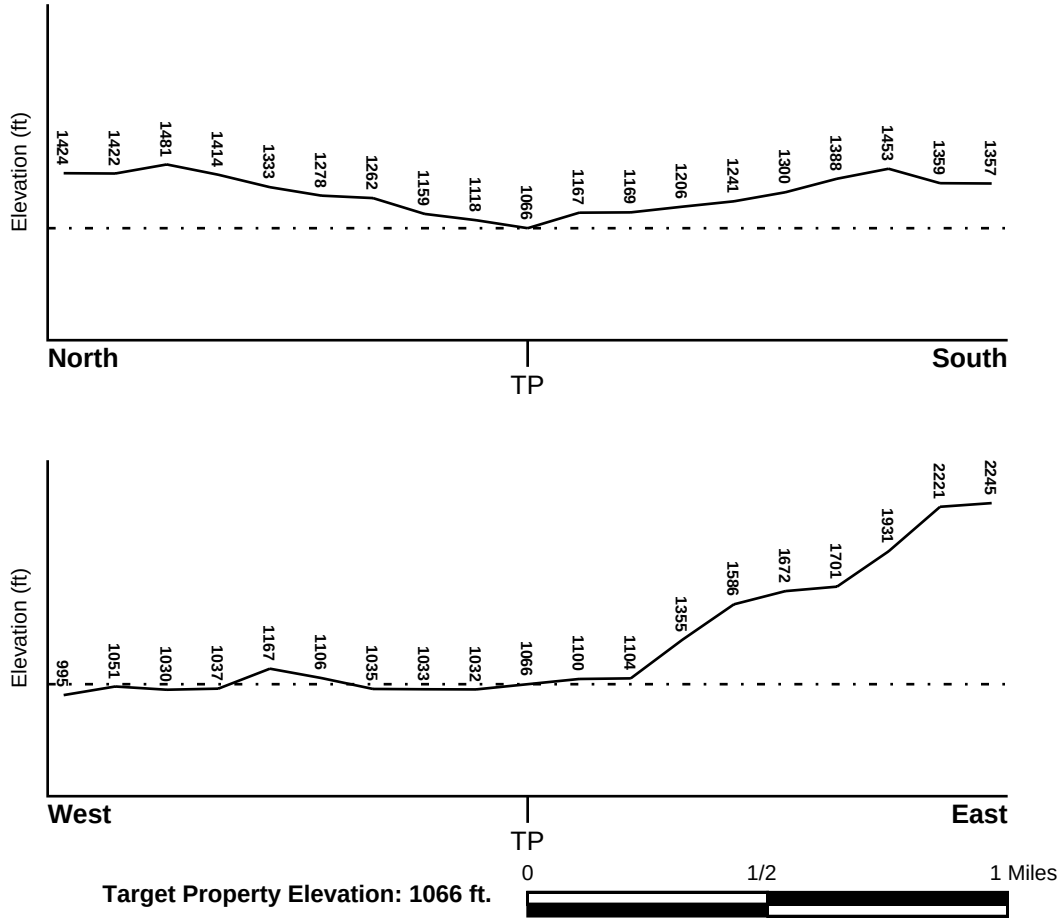
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06107C2375E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
Not Reported	

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WHITE RIVER	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

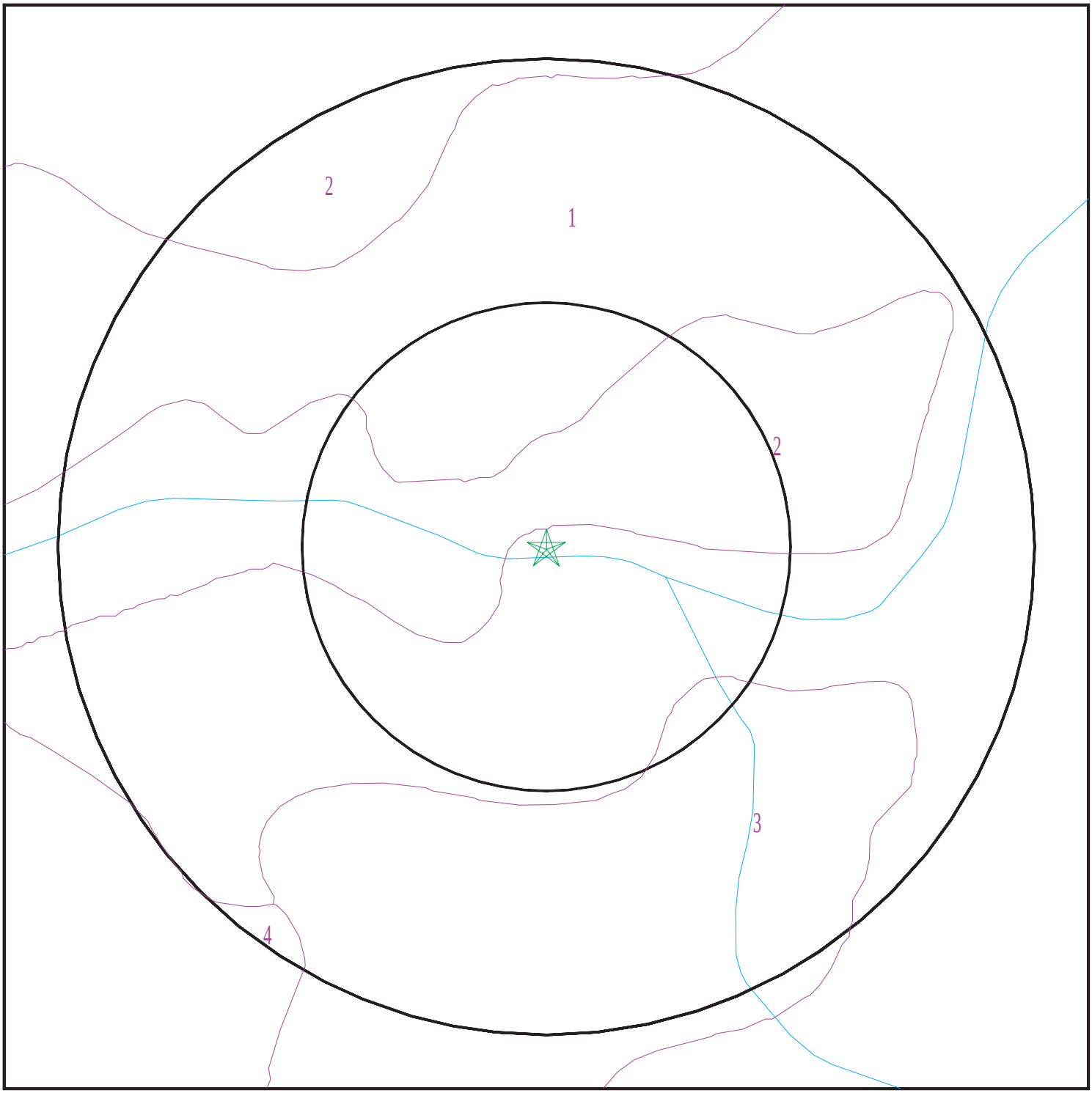
Era:	Mesozoic
System:	Cretaceous
Series:	Lower Cretaceous granitic rocks
Code:	Kg1 *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6288863.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	M109 Over White River	CLIENT:	Dokken Engineering
ADDRESS:	Mountain Road 109 Posey CA 93260	CONTACT:	Andrew Dellas
		INQUIRY #:	6288863.2s
LAT/LONG:	35.81325 / 118.845527	DATE:	December 03, 2020 3:58 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: BLASINGAME

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	sandy loam	Not reported	Not reported	Max: Min:	Max: Min:
2	7 inches	35 inches	sandy clay loam	Not reported	Not reported	Max: Min:	Max: Min:
3	35 inches	40 inches		Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 2

Soil Component Name: CIENEBA

Soil Surface Texture: coarse sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	coarse sandy loam	Not reported	Not reported	Max: Min:	Max: Min:
2	16 inches	20 inches		Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 3

Soil Component Name: BLASINGAME

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: 1 Min: 0.1	Max: Min:

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	7 inches	35 inches	sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: 1 Min: 0.1	Max: Min:
3	35 inches	40 inches	bedrock	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: 1 Min: 0.1	Max: Min:

Soil Map ID: 4

Soil Component Name: VISTA

Soil Surface Texture: coarse sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	27 inches	coarse sandy loam	Not reported	Not reported	Max: Min:	Max: Min:

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	27 inches	31 inches		Not reported	Not reported	Max: Min:	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

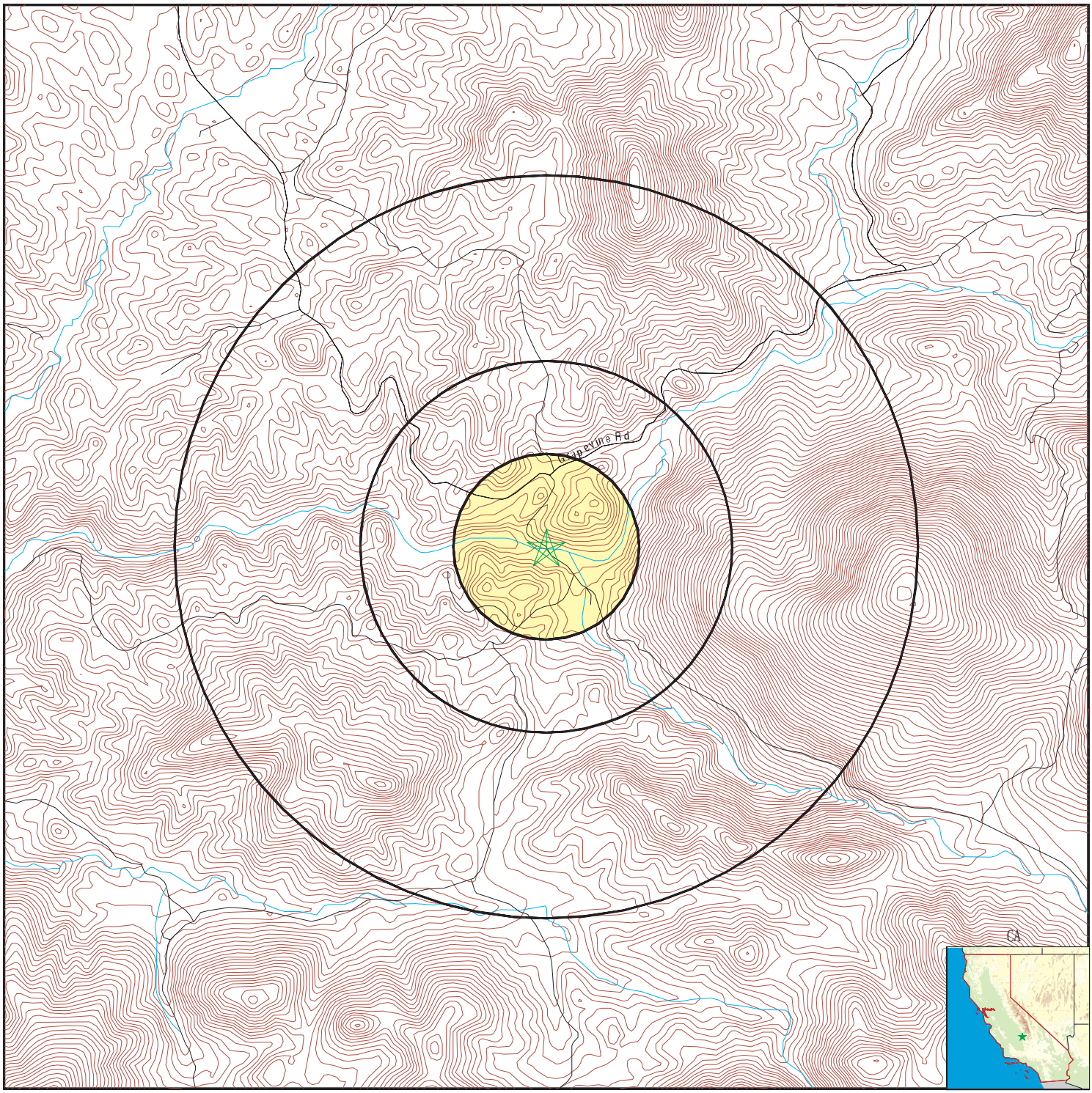
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 6288863.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	M109 Over White River	CLIENT:	Dokken Engineering
ADDRESS:	Mountain Road 109 Posey CA 93260	CONTACT:	Andrew Dellas
		INQUIRY #:	6288863.2s
LAT/LONG:	35.81325 / 118.845527	DATE:	December 03, 2020 3:58 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93260	1	1

Federal EPA Radon Zone for TULARE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for TULARE COUNTY, CA

Number of sites tested: 59

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.846 pCi/L	97%	3%	0%
Living Area - 2nd Floor	0.600 pCi/L	100%	0%	0%
Basement	3.100 pCi/L	50%	50%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

M109 Over White River

Mountain Road 109

Posey, CA 93260

Inquiry Number: 6288863.4

December 03, 2020

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

12/03/20

Site Name:

M109 Over White River
Mountain Road 109
Posey, CA 93260
EDR Inquiry # 6288863.4

Client Name:

Dokken Engineering
110 Blue Ravine Road Suite 200
Folsom, CA 95630-0000
Contact: Andrew Dellas

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Dokken Engineering were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA

Project: M109 over White River Project

Coordinates:

Latitude:	35.81325 35° 48' 48" North
Longitude:	-118.845527 -118° 50' 44" West
UTM Zone:	Zone 11 North
UTM X Meters:	333266.59
UTM Y Meters:	3964807.07
Elevation:	1065.28' above sea level

Maps Provided:

2012
1973
1965
1952
1946
1943
1936

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

White River
2012
7.5-minute, 24000

1973 Source Sheets

White River
1973
7.5-minute, 24000
Aerial Photo Revised 1963

1965 Source Sheets

White River
1965
7.5-minute, 24000
Aerial Photo Revised 1963

1952 Source Sheets

White River
1952
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1946 Source Sheets

WHITE RIVER
1946
15-minute, 62500

1943 Source Sheets

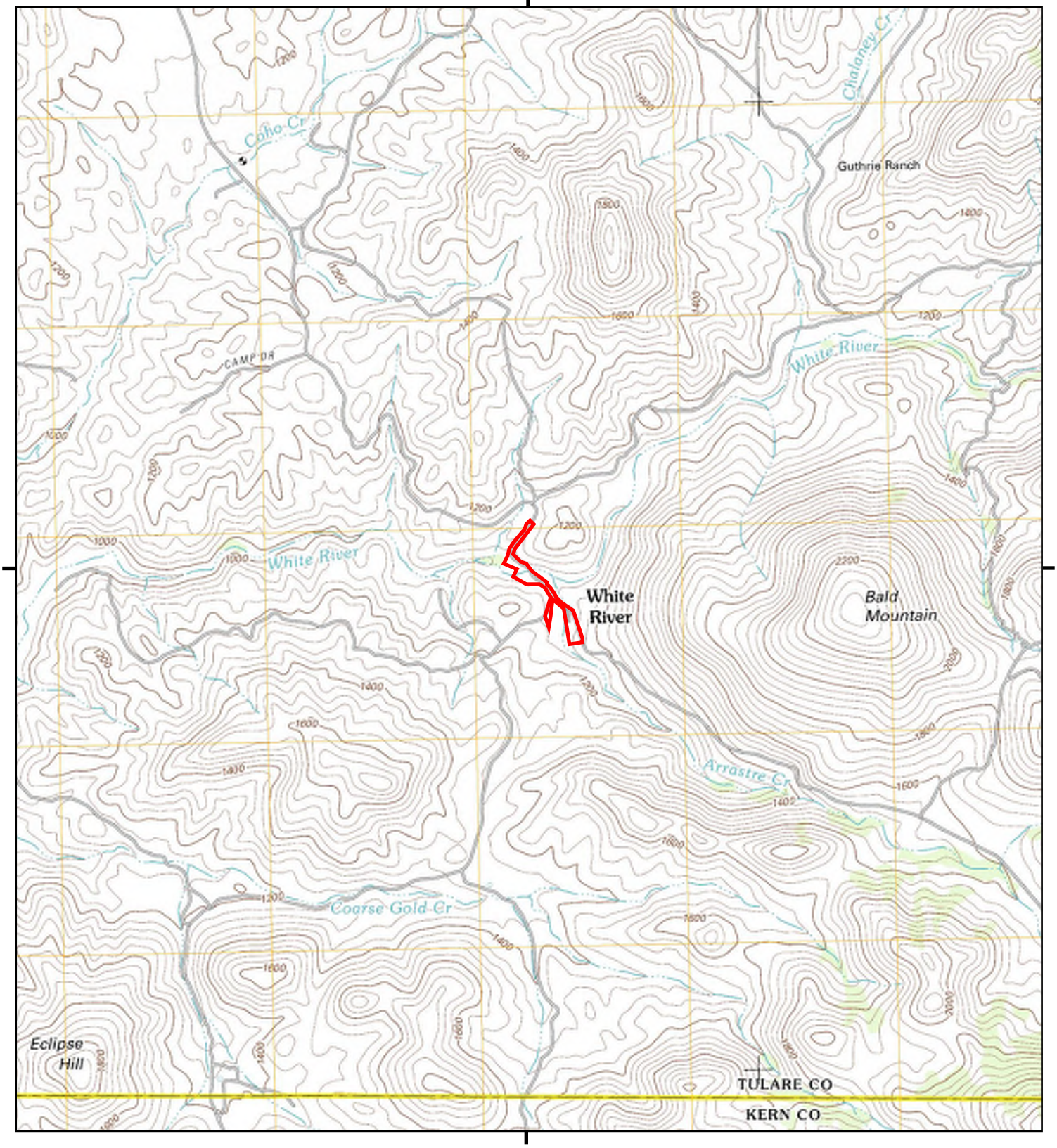
Tobias Peak
1943
30-minute, 125000

1936 Source Sheets

WHITE RIVER
1936
7.5-minute, 31680

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

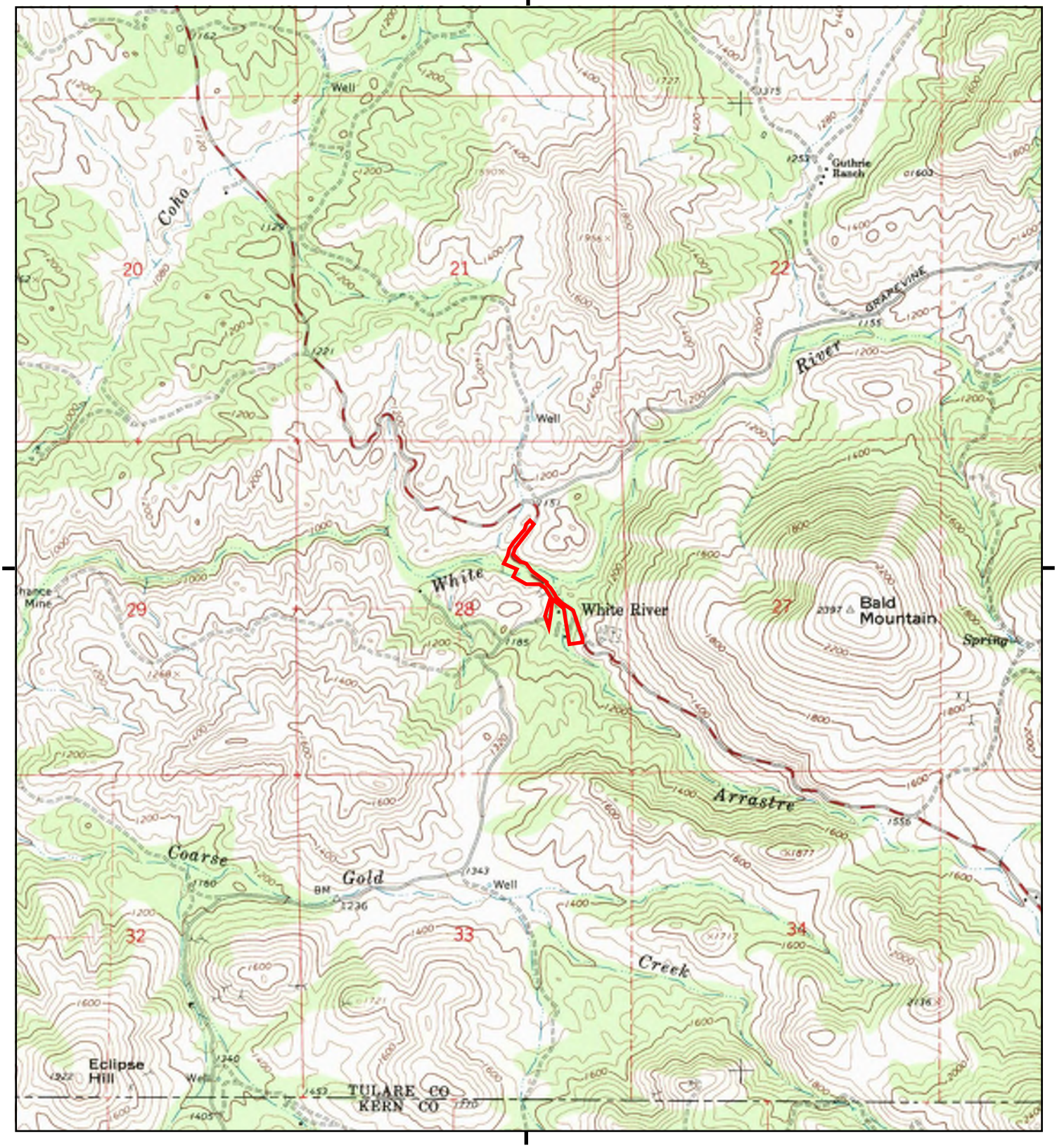
TP, White River, 2012, 7.5-minute

SITE NAME: M109 Over White River
ADDRESS: Mountain Road 109
Posey, CA 93260
CLIENT: Dokken Engineering

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

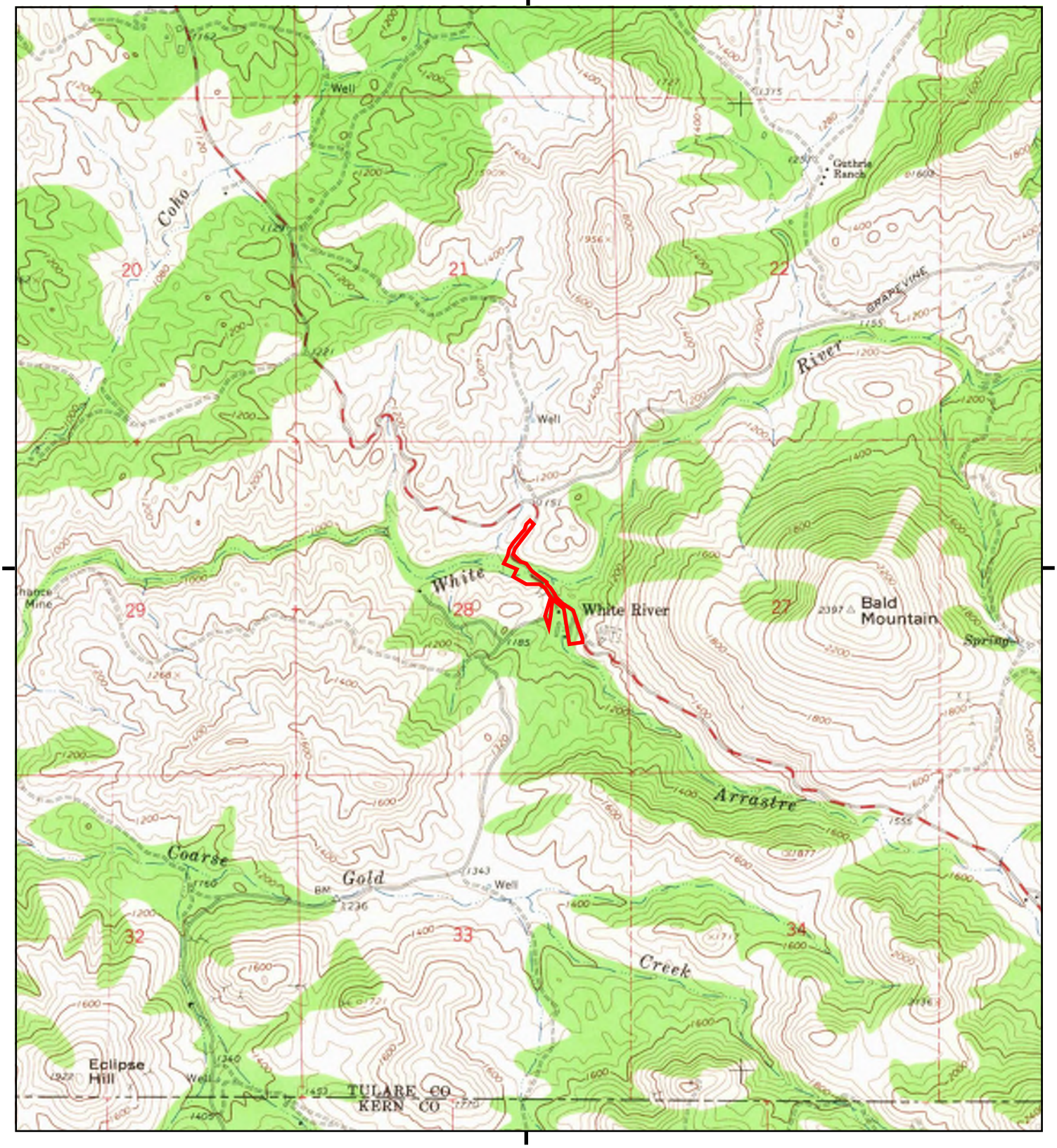
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, White River, 1973, 7.5-minute

SITE NAME: M109 Over White River
ADDRESS: Mountain Road 109
Posey, CA 93260
CLIENT: Dokken Engineering

N



This report includes information from the following map sheet(s).

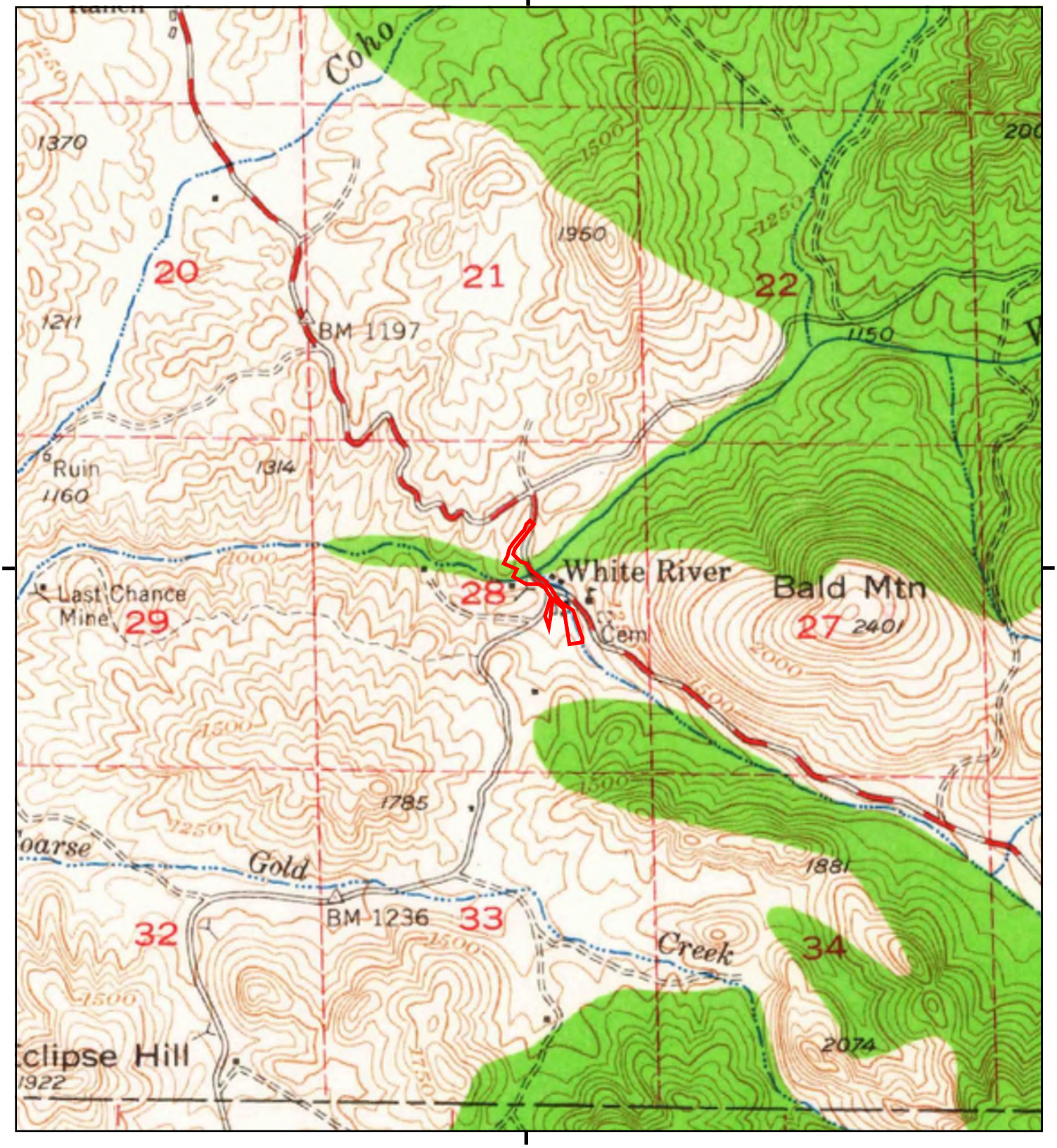
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, White River, 1965, 7.5-minute

SITE NAME: M109 Over White River
ADDRESS: Mountain Road 109
Posey, CA 93260
CLIENT: Dokken Engineering

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, White River, 1952, 15-minute

SITE NAME: M109 Over White River
ADDRESS: Mountain Road 109
Posey, CA 93260
CLIENT: Dokken Engineering

N

This report includes information from the following map sheet(s).

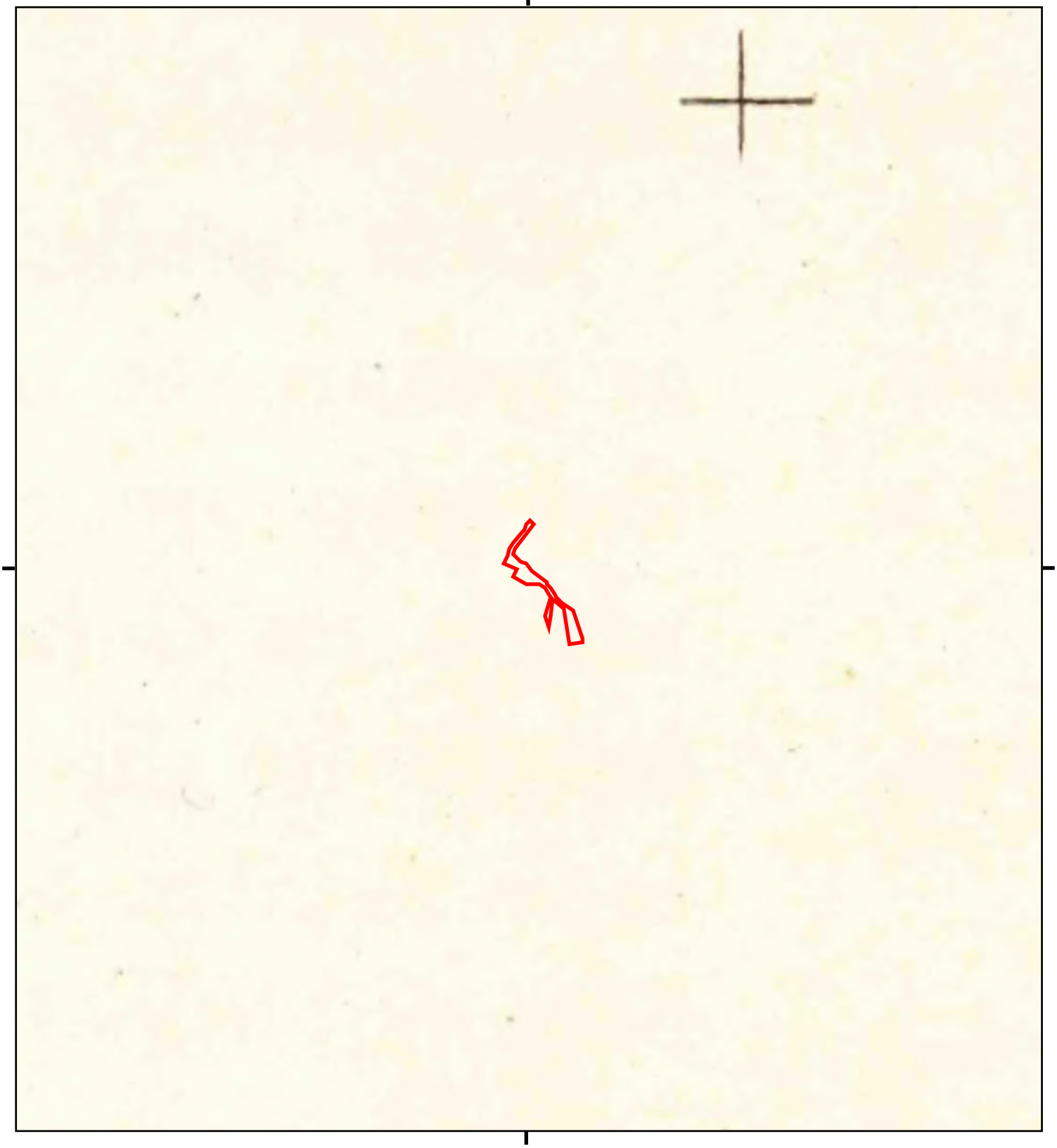
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, WHITE RIVER, 1946, 15-minute

SITE NAME: M109 Over White River
ADDRESS: Mountain Road 109
Posey, CA 93260
CLIENT: Dokken Engineering

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

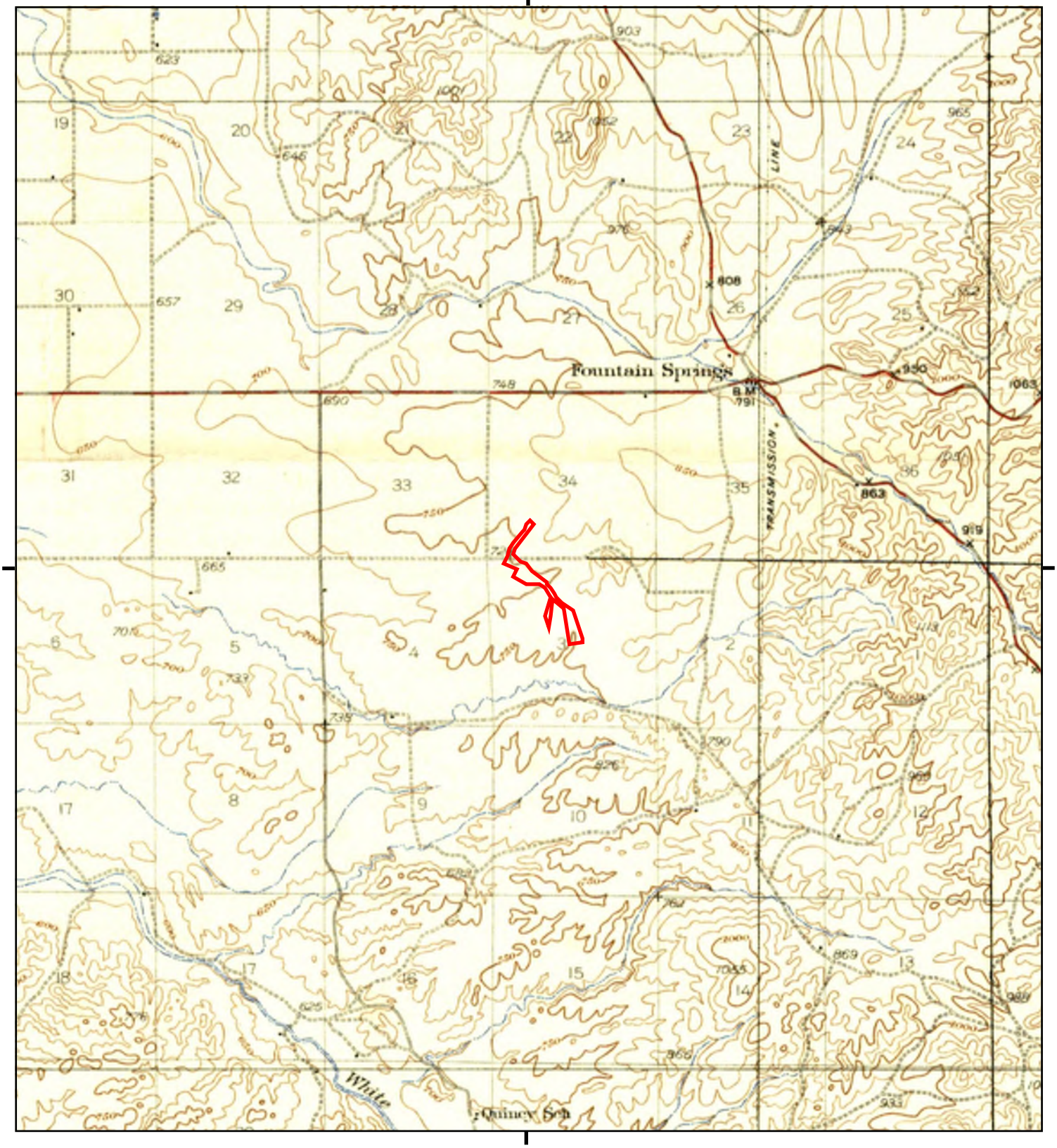
TP, Tobias Peak, 1943, 30-minute

SITE NAME: M109 Over White River
ADDRESS: Mountain Road 109
Posey, CA 93260
CLIENT: Dokken Engineering

N

Historical Topo Map

1936



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, WHITE RIVER, 1936, 7.5-minute

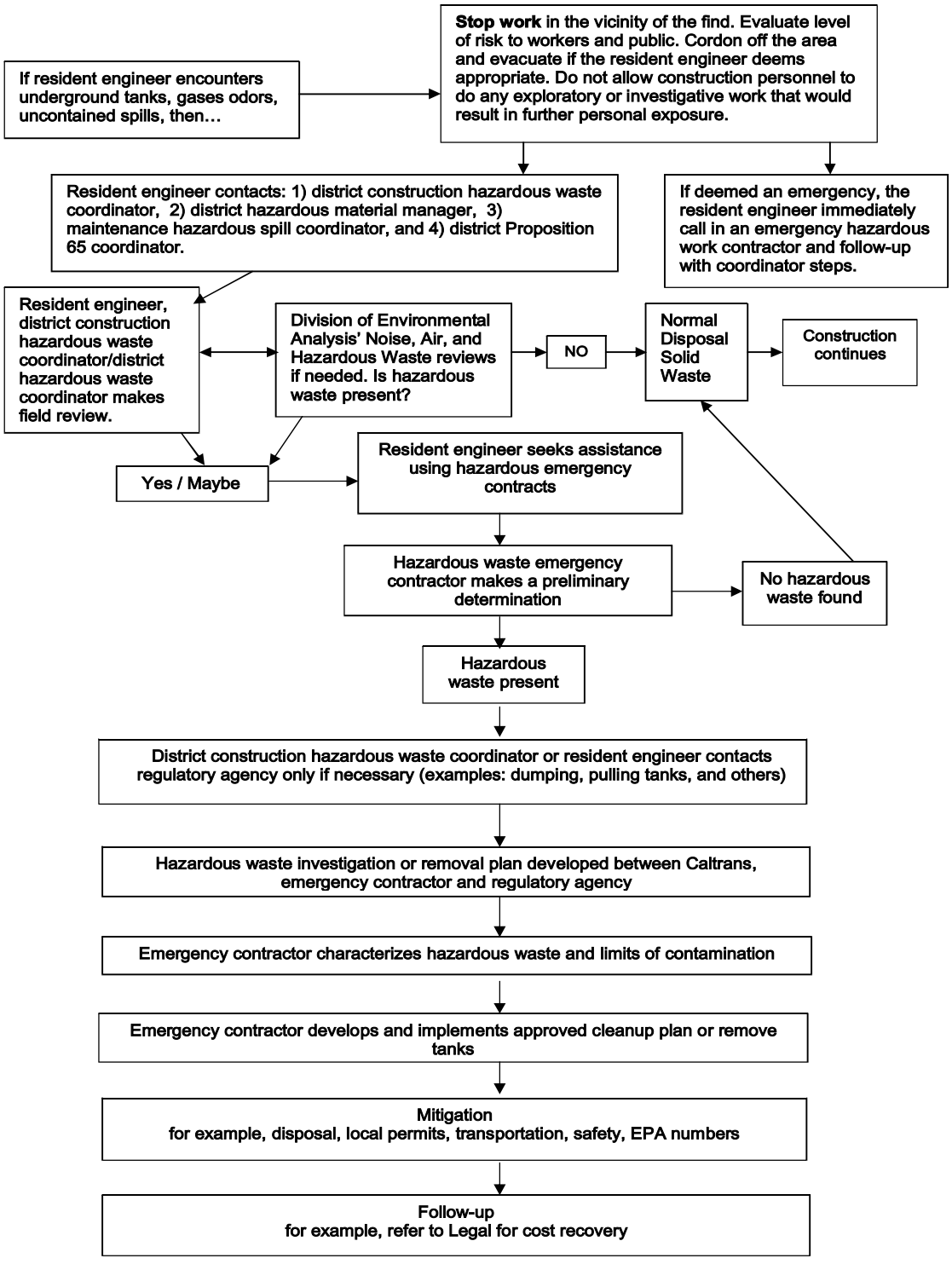
SITE NAME: M109 Over White River
ADDRESS: Mountain Road 109
Posey, CA 93260
CLIENT: Dokken Engineering

N

APPENDIX B

Caltrans Hazardous Procedures

Table 7-1.1 Unknown Hazards Procedures



APPENDIX C

FEMA Firmette Floodplain Map

National Flood Hazard Layer FIRMette

FEMA

118°51'3"W 35°49'2"N

118°50'25"W 35°48'33"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/4/2020 at 3:17 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX D

Caltrans Initial Site Assessment Checklist

Initial Site Assessment (ISA) Checklist

Project Information

District 6
County TULARE
Route N/A
Post Mile N/A
Fed Project No. BRLS-5946(170)

Description:
Tulare County (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility.

Is the project on the HW Study Minimal-Risk Projects List (HW1)? No.

Project Manager: Jason Vivian phone # (559) 747-8569

Project Engineer: Robert Burns phone # (916) 858-0642

Project Screening

Attach the project location map to this checklist to show location of all known and/or potential HW sites identified.

1. Project Features: New R/W? Yes. Excavation? Yes. Railroad Involvement? No

   Structure demolition/modification? Yes. Subsurface utility relocation? No

2. Project Setting: The bridge is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California. The existing bridge was constructed in 1939 and is not eligible for the National Register of Historic Places. The structure is a two-span steel girder with timber deck and asphalt over bridge structure supported on spread footings. The bridge measures approximately 40 feet in total length with a total width of 16 feet and clear width between railing of 11 feet. The approximate limits of the project are approximately 500 feet northwest and 300 feet southeast of the existing M109 crossing of White River.

   Rural or Urban: Rural

   Current land uses: Open space

   Adjacent land uses: Open space
   (industrial, light industry, commercial, agricultural, residential, etc.)

3. Check federal, State, and local environmental and health regulatory agency records as necessary, to see if any known hazardous waste site is in or near the project area. If a known site is identified, show its location on the attached map and attach additional sheets, as needed, to provide pertinent information for the proposed project. No Known Sites.

4. Conduct Field Inspection. Date 11/30/2020 Use the attached map to locate potential or known HW sites.

   STORAGE STRUCTURES / PIPELINES:

   Underground tanks Not observed Surface tanks Not observed

Sumps Not observed | Ponds Not observed

Drums Rusted metal drum | Basins Not observed

Transformers Not observed | Landfill Not observed

Other Corrugated metal sheets near culvert

CONTAMINATION: (spills, leaks, illegal dumping, etc.)

Surface staining Not observed | Oil sheen Not observed

Odors Not observed | Vegetation damage Not observed

Other Occasional surface litter (cans, tires) and construction debris. Black oil type substance observed under bridge deck.

HAZARDOUS MATERIALS: (asbestos, lead, etc.)

Buildings Not observed | Spray-on fireproofing Not observed

Pipe wrap Not observed | Friable tile Not observed

Acoustical plaster Not observed | Serpentine Not observed

Paint Thermoplastic paint, black out paint | Other None

5. Additional record search, as necessary, of subsequent land uses that could have resulted in a hazardous waste site. Use the attached map to show the location of potential hazardous waste sites. None.

6. Other comments and/or observations:
   None.

ISA Determination

Does the project have potential hazardous waste involvement? Yes. If there is known or potential hazardous waste involvement, is additional ISA work needed before task orders can be prepared for the Investigation? No. If "YES," explain; then give an estimate of additional time required:

A brief memo should be prepared to transmit the ISA conclusions to the Project Manager and Project Engineer.

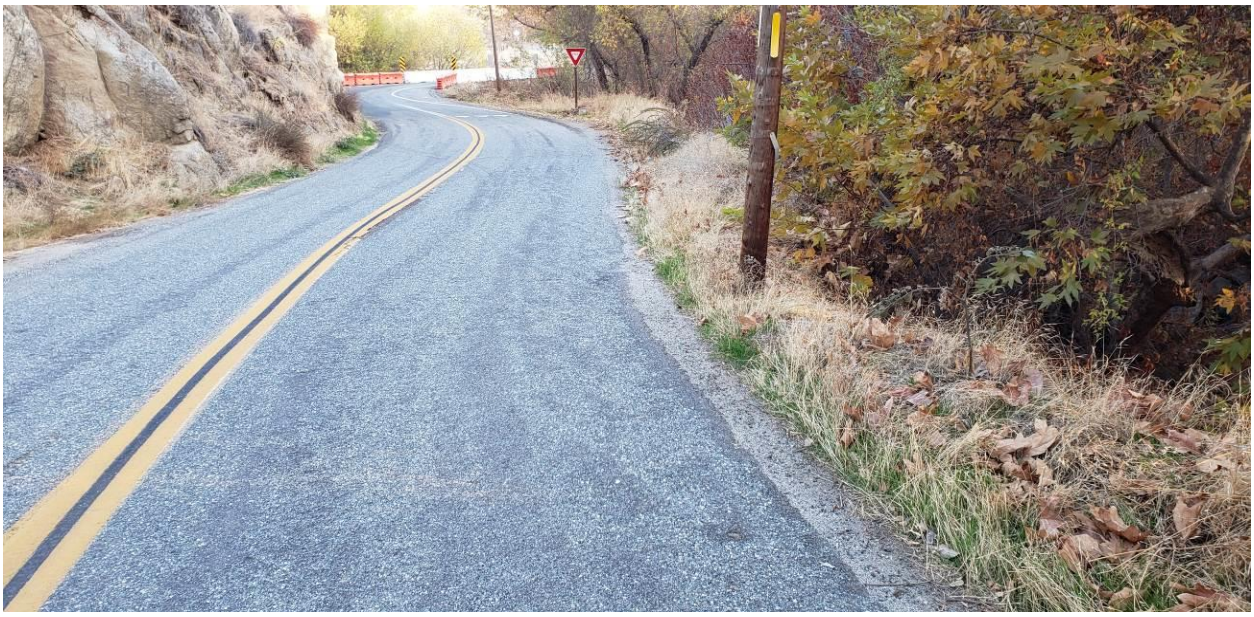
ISA Conducted by Cesar Montes de Oca, PE Date 11/30/2020

Signature _____

APPENDIX E

Representative Site Photographs

Photograph 1: Representative photograph of existing road looking south approaching the existing bridge.



Photograph 2: Representative photograph of existing road looking south approaching the existing bridge.

Photograph 3: Representative photograph of the existing bridge.

Photograph 4: Representative photograph of the existing bridge.

Photograph 5: Representative photograph of the existing bridge.

Photograph 6: Representative photograph of the existing bridge.

Photograph 7: Representative photograph of buildings near to the project area.

Photograph 8: Representative photograph of driveway and buildings near to the project area.

Photograph 9: Representative photograph of utility pole and transformer.

APPENDIX F

References

REFERENCES

American Society for Testing and Materials (ASTM), 2005, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

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Attachment "E"

Noise Technical Memorandum

Mountain Road 109 White River Bridge Replacement Project

Noise Technical Memorandum

Mountain Road 109 White River Bridge Replacement Project

Tulare County, California

District 6 – TUL

BRLS-5946(170)

February 2021

STATE OF CALIFORNIA

Caltrans

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Noise Technical Memorandum

Mountain Road 109 White River Bridge Replacement Project

Tulare County, California

District 6 – TUL

BRLS-5946(170)

February 2021

- STATE OF CALIFORNIA

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

Prepared By: _____ Date: 2/1/2021

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Prepared By: _____ Date: 2/1/2021

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(559) 624-7135

Statement of Compliance: Produced in compliance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

Introduction

This memorandum discusses temporary (including short-term and intermittent) construction-related noise impacts from implementation of the M109 over White River Bridge Replacement Project (Appendix A - Figure 1. Project Vicinity and Figure 2. Project Location).

Tulare County is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133). The scope of work would include replacing the bridge in an adjacent but likely off alignment location, approach roadway work, grading, cut and fill, equipment staging areas, drainage, right-of-way acquisition, overhead/aerial utility relocation, and vegetation removal.

Project Description

Tulare County (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility.

The bridge is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California. The existing bridge was constructed in 1939 and is not eligible for the National Register of Historic Places. The structure is a two span steel girder with timber deck and asphalt over bridge structure supported on spread footings. The bridge measures approximately 40 feet in total length with a total width of 16 feet and clear width between railing of 11 feet.

The bridge is predominantly used by local residents' vehicles and agricultural-related equipment and the roadway narrows to one lane of un-signalized bi-directional traffic over the bridge. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 (out of a potential 100 rating) and was flagged structurally deficient due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads.

Temporary construction easements are needed throughout the project area and construction staging would take place within County right-of-way and adjacent privately owned parcels. Minor permanent right-of-way acquisitions are anticipated.

The total estimated cost to implement the Build Alternative is approximately $2.1 million. The project is included in the Fiscal Years 2019 Federal Transportation Improvement Program (FTIP) and is funded through the 2016/17 – 2021/22 Federal Highway Bridge Program (HBP).

Project Purpose

The purpose of the project is to:

- Replace the existing M109 over White River Bridge with a new two-lane bridge
- Provide a structure that meets current design standards
- Provide improved safety and operations on the facility
- Provide improved access for local use of agricultural equipment

Project Need

The project is needed because the existing bridge has a sufficiency rating of 4.5 and was flagged structurally deficient due to the bridge's low load carrying capacity. The existing bridge is narrow and only capable of carrying 1 lane of traffic.

Build Alternative

The Build Alternative would replace the existing M109 bridge crossing over White River with a new two-lane bridge structure to match the required minimum width to carry two lanes of traffic. The approximate limits of the project are approximately 500 feet northwest and 300 feet southeast of the existing M109 crossing of White River. The project would conform to the existing roadway width and would provide an improved road alignment for safety. The bridge structure would consist of a concrete slab bridge. The proposed bridge would be approximately 100 feet long and would be no greater than 18 feet in height when measured from the creek bottom.

The White River channel would be graded to restore natural channel contours. Rock slope protection may be necessary around the bridge abutments for scour protection.

Temporary construction easements would be needed for bridge construction and construction staging areas. Permanent slope easements may be required to conform the finished grades of the maintenance roads along each side of the creek to the bridge profile grade. Right-of-way acquisition and utility relocations are anticipated.

M109 and driveway access would remain open during construction. Due to the length of a potential detour route, stage construction would be utilized in order to keep the roadway open to traffic during construction. Construction is anticipated to begin in 2024 and would take approximately 12 months to complete.

The project is subject to both California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) processes. The County is the lead agency under CEQA, and Caltrans is the lead agency under NEPA.

No-Build Alternative

The No-Build Alternative would result in no modifications to the M109 over White River Bridge. As such, the existing bridge at M109 over White River Road would remain both functionally obsolete and structurally deficient as noted earlier.

Noise Setting

In accordance with the Caltrans Environmental Handbook guidelines, noise is defined as unwanted sound. Sound levels usually are measured and expressed in decibels (dB), with 0 dB being the threshold of hearing. Decibel levels range from 0 to 140: 50 dB for light traffic is considered a low decibel level, whereas 120 dB for a jet takeoff at 200 feet (ft.) is considered a high decibel level.

Under the Caltrans Traffic Noise Analysis Protocol 2011, projects other than Type 1 require an evaluation of predicted construction noise. This project is not a Type 1 project as defined in 23 CFR 772.5(h); "construction of a highway on new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes." The proposed Project will replace an existing 1-lane bridge with a new 2-lane bridge but would not create any additional through-traffic lanes. The replacement bridge will not generate new substantial noise and therefore, only construction-related noise impacts are discussed.

The project is located within unincorporated Tulare County. Temporary construction easements are needed throughout the project area and construction-related staging would take place within County right-of-way and adjacent privately owned parcels. Minor permanent right-of-way acquisitions are anticipated. Construction-related activity would occur adjacent to low population-density rural areas zoned Foothill, Agricultural.

Pile driving will potentially occur during construction to install footings of the replacement bridge. The nearest sensitive receptors (residences) are located approximately 150 feet from where pile driving would occur. However, the proposed project would use vibratory pile driving to minimize noise and vibration.

Noise sources that contribute to ambient noise levels in and adjacent to the project site include periodic (that is, intermittent, short-lived) noise of low levels of traffic (i.e., vehicles) from Road M109 and noise from agricultural-related activities (intermittent). Table 1 summarizes typical ambient noise levels based on population density.

Table 1. Population Density and Associated Ambient Noise Levels

Population Density	dBA, Ldn
Rural Suburban	40–50
Quiet suburban residential or small town	45–50
Normal suburban residential urban	50–55
Normal urban residential	60
Noisy urban residential	65

Population Density	dBA, Ldn
Very noisy urban residential	70
Downtown, major metropolis	75–80
Under flight path at major airport, 0.5 to 1 mile from runway	78–85
Adjoining freeway or near a major airport	80–90
Sources: Cowan 1984, Hoover and Keith 1996	

The vicinity of the project area is most similar to that of a "rural suburban" setting due to the small population, lack of local businesses, and minimal traffic on Road M109. Such areas have an expected typical noise level of 40-50 dBA.

Local Requirements
The following policies under Chapter 10.8 Noise of the Tulare County General Plan are relevant and applicable to construction activities and related noise:

HS-8.11 Peak Noise Generators
The County shall limit noise generating activities, such as construction, to hours of normal business operation (7 a.m. to 7 p.m.). No peak noise generation activities shall be allowed to occur outside of normal business hours without County approval.

HS-8.17 Coordinate with Caltrans
The County shall work with Caltrans to mitigate noise impacts on sensitive receptors near State roadways, by requiring noise buffering or insulation in new construction.

HS-8.18 Construction Noise
The County shall seek to limit the potential noise impacts of construction activities by limiting construction activities to the hours of 7 am to 7 pm, Monday through Saturday when construction activities are located near sensitive receptors. No construction shall occur on Sundays or national holidays without a permit from the County to minimize noise impacts associated with development near sensitive receptors.

HS-8.19 Construction Noise Control
The County shall ensure that construction contractors implement best guidelines (i.e. berms, screens, etc.) as appropriate and feasible to reduce construction-related noise-impacts on surrounding land uses.

Environmental Consequences

Generally, noise levels at construction sites can vary from 55 dBA to a maximum of nearly 90 dBA when heavy equipment is used. During construction-related activities of the project, noise from construction-related activities may intermittently (that is, short-term and temporarily) dominate the noise environment in the immediate area of construction. Construction noise is

regulated by Caltrans Standard Specifications Section 14-8.02 “Noise Control,” which state that noise levels generated during construction shall comply with applicable local, state, and federal regulations, and that all equipment shall be fitted with adequate mufflers according to the manufacturers’ specifications.

Construction-related noise from this project would be intermittent, short-term, and temporary in nature. Further, noise levels would vary depending on the type, duration, and occurrence of construction-related activity. The loudest construction-related activities may include engine noise from construction vehicles, jack hammering, and pile driving. For this project, the lowest construction equipment-related noise levels would be 55 dBA at a distance of 50 feet for sound from a pick-up truck. The highest construction-related noise levels would be for pile driving (up to 90 dBA at a distance of 50 feet) and for jackhammering (88 dBA at a distance of 50 feet) involved in general bridge demolition activities.

Due to the temporarily increased noise levels during construction, minimal adverse noise impacts from construction-related activities are anticipated. Construction would be conducted in accordance with Caltrans Standard Specifications Section 14-8.02. In addition to County of Tulare policies noted earlier, the following measures shall be implemented:

NOI-1: To minimize the construction-generated noise, abatement measures from Standard Specification 14-8.02 “Noise Control” and SSP 14-8.02 must be followed:

- Do not operate construction equipment or run the equipment engines from 7:00 p.m. to 7:00 a.m. or on Sundays, with the exception that you may operate equipment within the Project limits during these hours to:
  - Service traffic control facilities
  - Service construction equipment
- Equip an internal combustion engine with the manufacturer recommended muffler.
- Do not operate an internal combustion engine on the job site without the appropriate muffler.
- A variance from these requirements may be provided by request at the discretion of Tulare County.

Construction-related noise would be short-term, temporary, and intermittent. Construction is expected to be completed within a twelve-month window. No additional construction-related noise control minimization measures are necessary.

Summary

From the above discussion, it is concluded that construction-related noise impacts caused by the project would not be substantial because: 1) the project is not a Type 1 project; 2) the proposed construction duration is short-term; and 3) construction of the project would utilize proposed minimization methods. Temporary construction-related noise impacts will be minimized by implementation of Caltrans standard noise control requirements.

Minimal adverse noise impacts from construction-related activities are anticipated because construction would be conducted in accordance with Caltrans' Standard Specifications and Tulare County requirements, and construction would be short-term, temporary, and intermittent.

References

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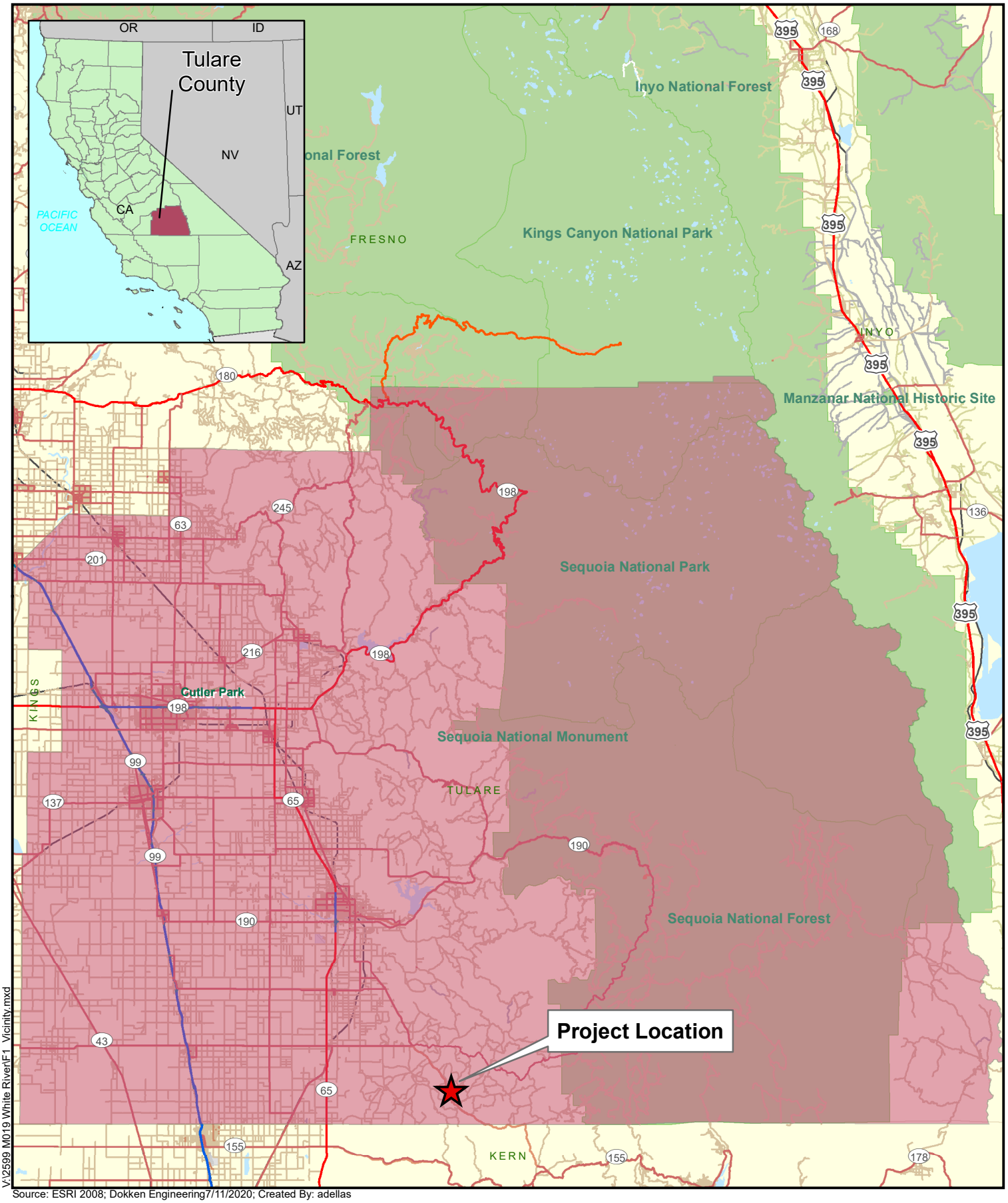
Appendix A. Figures



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Source: ESRI 2008; Dokken Engineering7/11/2020; Created By: adellas

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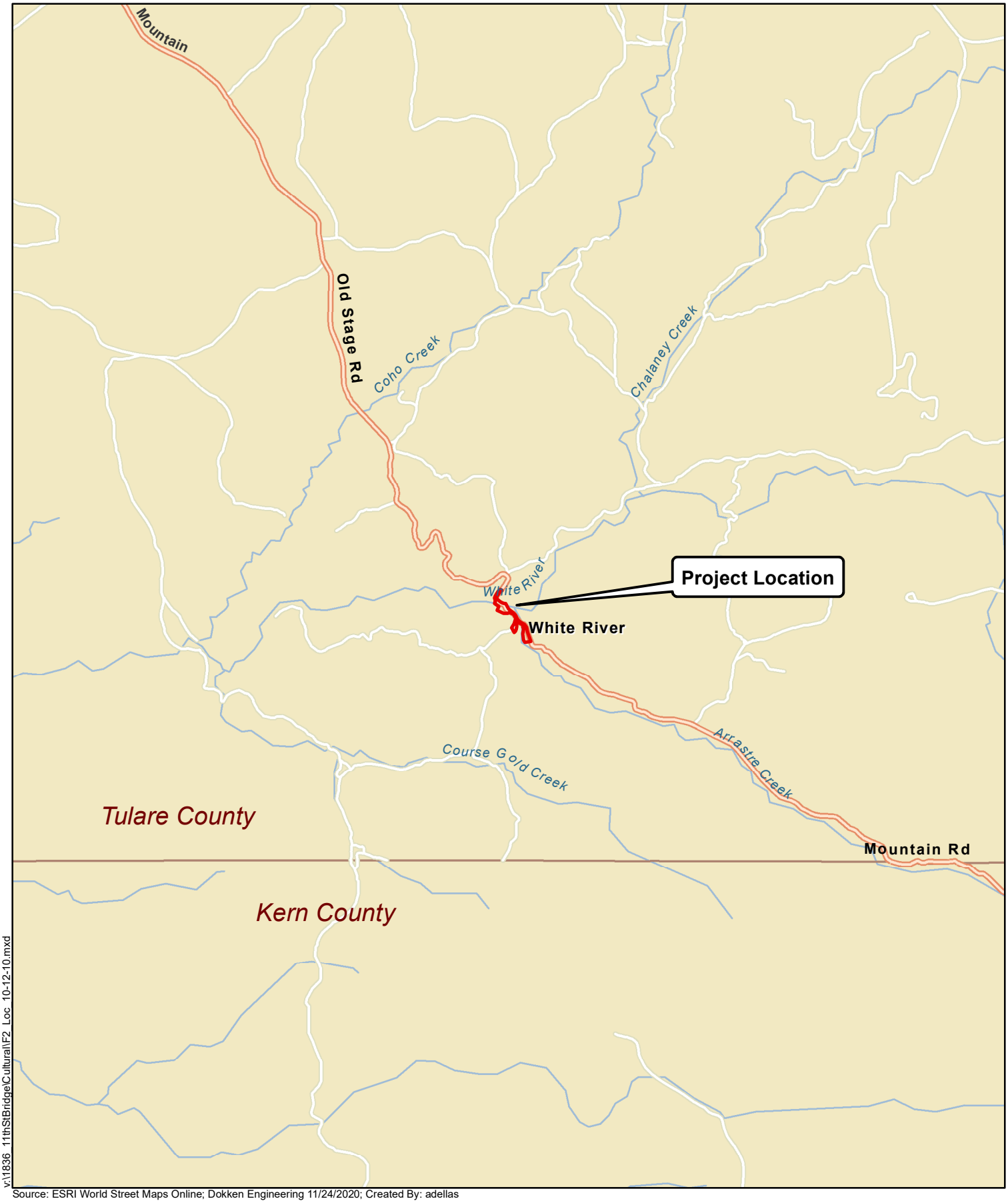
FIGURE 1
Project Vicinity
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California



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Source: ESRI World Street Maps Online; Dokken Engineering 11/24/2020; Created By: adellas

0 0.5 1 1.5 2 Miles

FIGURE 2
Project Location
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California

Attachment "F"

Water Quality Technical Memorandum

Mountain Road 109 White River Bridge Replacement Project

Water Quality Technical Memorandum

Mountain Road 109 White River Bridge Replacement Project

Tulare County, California

District 6 – TUL

BRLS-5946(170)

February 2021

STATE OF CALIFORNIA

Caltrans

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Water Quality Technical Memorandum

Mountain Road 109 White River Bridge Replacement Project

Tulare County, California

District 6 – TUL

BRLS-5946(170)

February 2021

STATE OF CALIFORNIA

Caltrans

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Prepared By: _____ Date: 2/1/2021

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Table of Contents

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List of Abbreviated Terms

§	Section
ASBS	Areas of Special Biological Significance
BMPs	Best Management Practices
BSA	Biological Study Area
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
County	Tulare County
CVFPB	Central Valley Flood Protection Board
CWA	Clean Water Act
DF	Designated Floodway
DSA	Disturbed Soil Area
EFH	Essential Fish Habitat
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FTIP	Federal Transportation Improvement Program
HBP	Highway Bridge Program
M109	Mountain Road 109
MCLs	Maximum contaminant levels
MS4s	Municipal Separate Storm Sewer Systems
NEPA	National Environmental Policy Act
NESMI	Natural Environment Study Minimal Impacts
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
Project	M109 White River Bridge Replacement Project
QSD	Qualified Storm Water Pollution Prevention Plan Developer
RWQCB	Regional Water Quality Control Board
SMARTS	Stormwater Multiple Application and Report Tracking System
SWMP	Stormwater Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMDLs	Total Maximum Daily Loads
U.S.	United States
USACE	United States Army Corps of Engineers
USGS	United States Geographic Survey
WDRs	Waste Discharge Requirements
WPCP	Water Pollution Control Plan
WQTM	Water Quality Technical Memorandum

Summary

The County of Tulare (County) in cooperation with the California Department of Transportation (Caltrans), proposes to replace the existing Mountain Road 109 (M109) over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility as the M109 White River Bridge Replacement Project (Project). The bridge is located within an agricultural area within the foothills of the southern Sierra Nevada Mountains, approximately 8 miles southeast of Fountain Springs in Tulare County, California.

The purpose of the Water Quality Technical Memorandum is to fulfill the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), and to provide information, to the extent possible, for National Pollution Discharge Elimination System (NPDES) permitting. The document includes a discussion of the proposed Project, the physical setting of the Project area, and the regulatory framework with respect to water quality; it also provides data on surface and groundwater resources and the water quality of these waters within the Project area, describes water quality impairments and beneficial uses, and identifies potential water quality impacts/benefits associated with the proposed Project. The document then recommends avoidance and/or minimization measures to reduce potentially adverse impacts.

The proposed Project would replace the existing substandard M109 bridge over White River with a structure meeting current design standards, in an adjacent alignment relative to the existing bridge. White River is the main surface water feature within and impacted by the Project area, as well as associated seasonal wetland and riparian woodland habitats.

The Project storm water drainage would be designed consistent with County requirements and the Caltrans Project Planning and Design Guide and Storm Water Management Plan. Temporary Best Management Practices (BMPs), including practices for erosion control, would be implemented during construction-related activities.

Regulatory permits under the Clean Water Act (CWA) will be obtained, including a §401 Water Quality Certification and a §404 Nationwide Permit 14 for the discharge of dredged or fill material into waters of the United States (U.S.) and State. Additionally, a Fish and Game Code Section (§) 1602 will be obtained for Project effects to riparian habitats and CDFW jurisdictional floodplain areas. A NPDES Permit from the Regional Water Quality Control Board (RWQCB) will be obtained as well. Any further avoidance or minimization measures from regulatory permitting would be incorporated into the Project, and adherence to the requirements set forth in these permits will further minimize impacts to water quality and aquatic resources.

1. Introduction

1.1 Approach to Water Quality Assessment

The purpose of the Water Quality Technical Memorandum (WQTM) is to fulfill the requirements of NEPA and CEQA, and to provide information, to the extent possible, for NPDES permitting. The document includes a discussion of the proposed M109 White River Bridge Replacement Project (Project), the physical setting of the Project area, and the regulatory framework with respect to water quality. It also provides data on surface water and groundwater resources within the Project area and the water quality of these waters, describes water quality impairments and beneficial uses, identifies potential water quality impacts/benefits associated with the proposed Project, and recommends avoidance and/or minimization measures to avoid potentially adverse impacts.

1.2 Project Description

Tulare County, in cooperation with Caltrans, is proposing to replace the existing M109 over White River Bridge (Bridge No. 46C-0133) with a two-lane bridge structure to provide improved safety and operations on the facility.

The bridge is located approximately 500 feet north of Mountain Road 12; approximately 8 miles southeast of Fountain Springs in Tulare County, California (Figure 1. Project Vicinity; Figure 2. Project Location). The existing bridge was constructed in 1939 and is not eligible for the National Register of Historic Places. The structure is a two-span steel girder with timber deck and asphalt over bridge structure supported on spread footings. The bridge measures approximately 40 feet in total length with a total width of 16 feet and clear width between railing of 11 feet.

The bridge is predominantly used by local residents' vehicles and agricultural-related equipment and the roadway narrows to one lane of un-signalized bi-directional traffic over the bridge. The bridge qualifies for replacement because it has a low sufficiency rating of 4.5 (out of a potential 100 rating) and was flagged structurally deficient due to the bridge's low load carrying capacity. In addition, the outer portion of the timber deck has shown significant deterioration, and only the inner portion of the deck width has been determined to have adequate strength to carry legal loads.

Temporary construction easements are needed throughout the project area and construction staging would take place within County right-of-way and adjacent privately owned parcels. Minor permanent right-of-way acquisitions are anticipated.

The total estimated cost to implement the Build Alternative is approximately $2.1 million. The project is included in the Fiscal Years 2019 Federal Transportation Improvement Program (FTIP) and is funded through the 2016/17 – 2021/22 Federal Highway Bridge Program (HBP).

1.2.1 Build Alternative

The Build Alternative would replace the existing M109 bridge crossing over White River with a new two-lane bridge structure to match the required minimum width to carry two lanes of traffic. The approximate limits of the project are approximately 500 feet northwest and 300 feet southeast of the existing M109 crossing of White River. The project would conform to the existing roadway width and would provide an improved road alignment for safety. The bridge structure would

consist of a concrete slab bridge. The proposed bridge would be approximately 100 feet long and would be no greater than 18 feet in height when measured from the creek bottom.

The White River channel would be graded to restore natural channel contours. Rock slope protection may be necessary around the bridge abutments for scour protection.

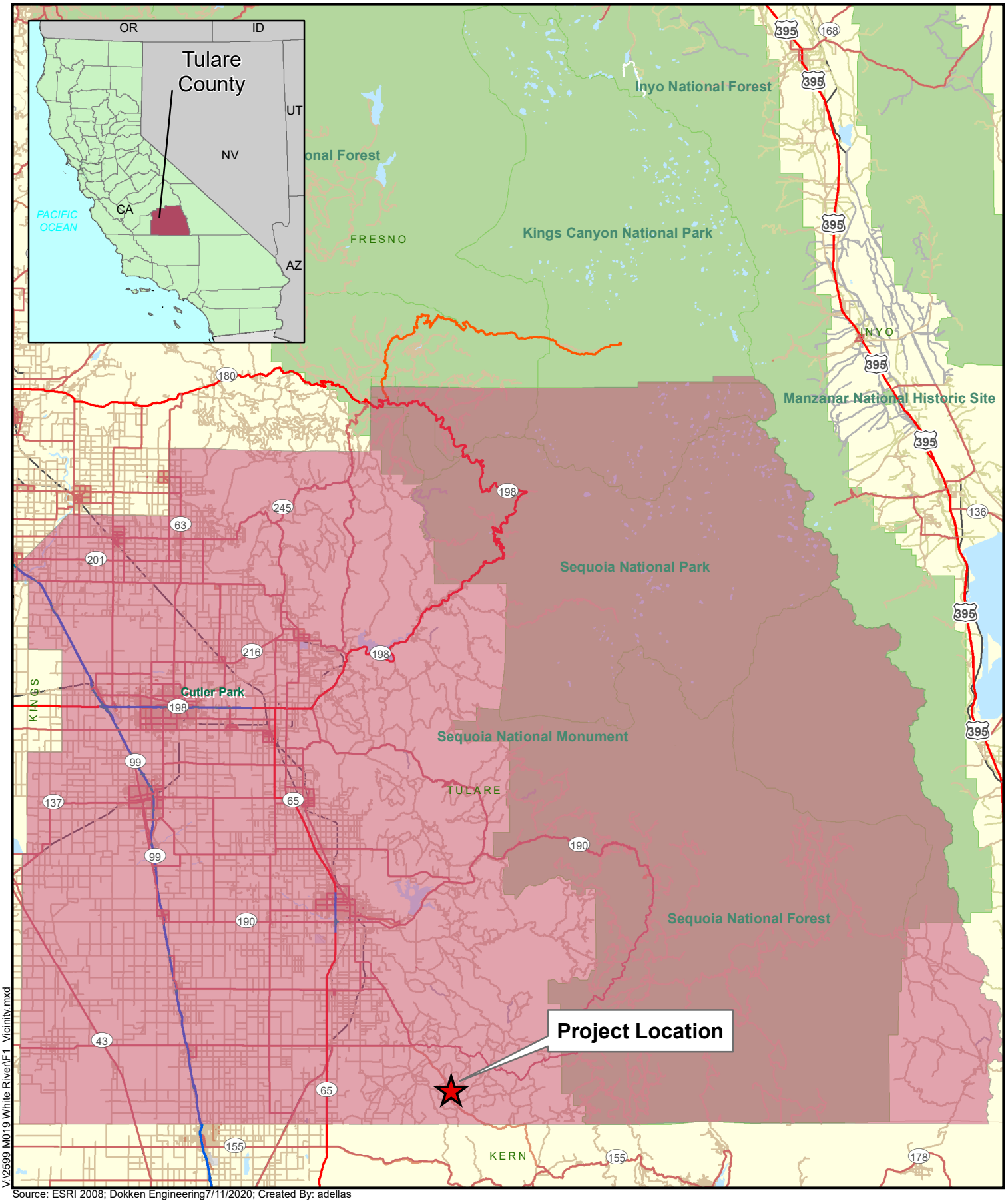
Temporary construction easements would be needed for bridge construction and construction staging areas. Permanent slope easements may be required to conform the finished grades of the maintenance roads along each side of the creek to the bridge profile grade. Right-of-way acquisition and utility relocations are anticipated.

M109 and driveway access would remain open during construction. Due to the length of a potential detour route, stage construction would be utilized in order to keep the roadway open to traffic during construction. Construction is anticipated to begin in 2024 and would take approximately 12 months to complete.

The project is subject to both CEQA and NEPA processes. The County is the lead agency under CEQA, and Caltrans is the lead agency under NEPA.

1.2.2 No Build Alternative

The No-Build Alternative would result in no modifications to the M109 over White River Bridge. As such, the existing bridge at M019 over White River Road would remain both functionally obsolete and structurally deficient as noted earlier.



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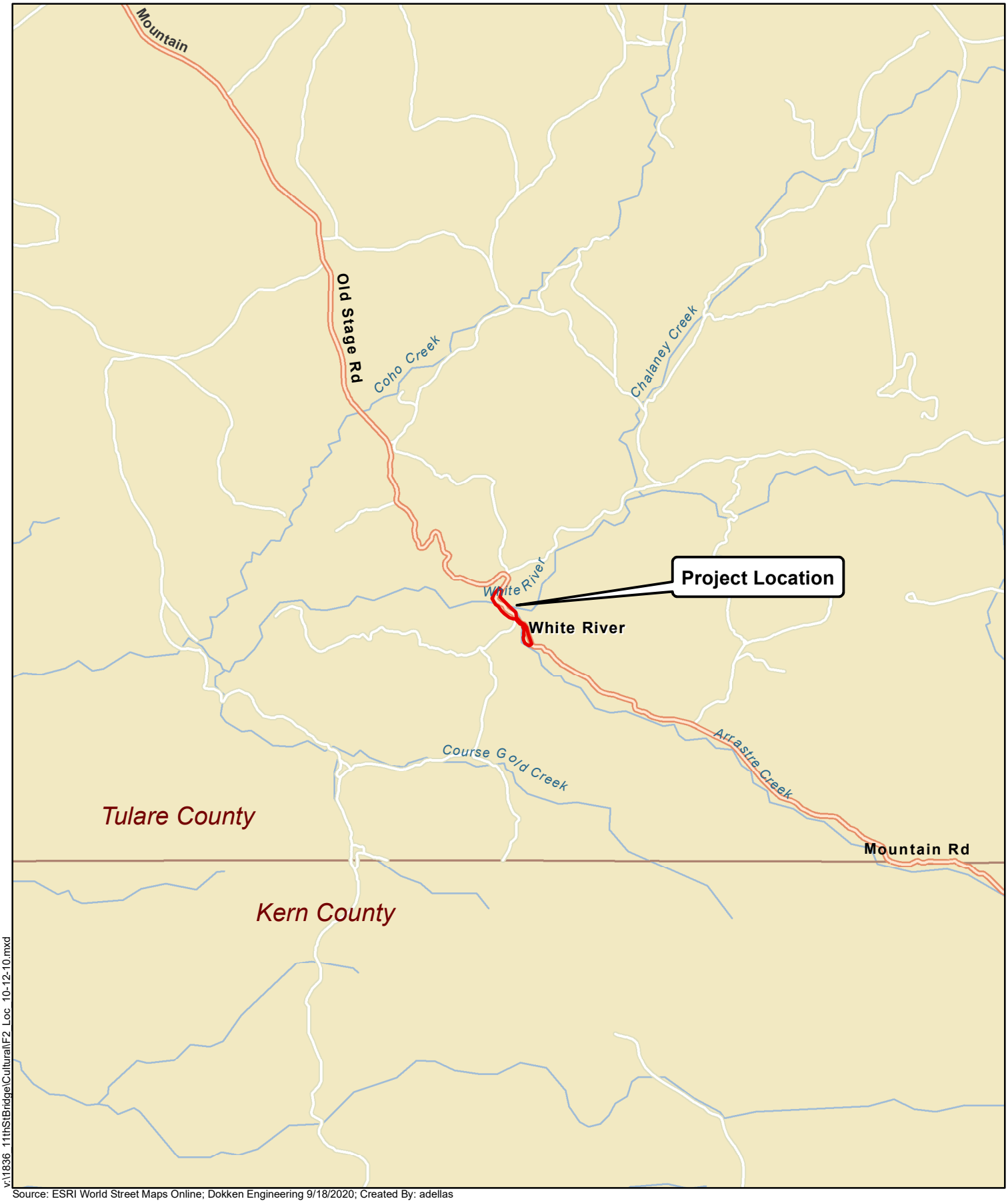

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Source: ESRI World Street Maps Online; Dokken Engineering 9/18/2020; Created By: adellas

0 0.5 1 1.5 2 Miles

FIGURE 2
Project Location
BR. NO. 46C-0133
M109 over White River Bridge Replacement Project
White River, Tulare County, California

2. Regulatory Setting

2.1 Federal Laws and Requirements

Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the U.S. from any point source unlawful unless the discharge is in compliance with a NPDES permit. Known today as the CWA, Congress has amended it several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. Important CWA sections are:

§303 and §304 require states to promulgate water quality standards, criteria, and guidelines.

§401 requires an applicant for a federal license or permit to conduct any activity, which may result in a discharge to waters of the U.S., to obtain certification from the State that the discharge would comply with other provisions of the act. (Most frequently required in tandem with a §404 permit request. See below).

§402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. RWQCBs administer this permitting program in California. §402(p) requires permits for discharges of storm water from industrial/construction and Municipal Separate Storm Sewer Systems (MS4s).

§404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

USACE issues two types of 404 permits: Standard and General permits. For General permits there are two types: Regional permits and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to authorize a variety of minor project activities with no more than minimal effects.

There are also two types of Standard permits: Individual permits and Letters of Permission. Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of USACE’s Standard permits. For Standard permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency’s (EPA) §404 (b)(1) Guidelines [U.S. EPA Code of Federal Regulations (CFR) 40 Part 230], and whether permit approval is in the public interest. The 404(b)(1) Guidelines were developed by the U.S. EPA in conjunction with USACE and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that USACE may not issue a permit if there is a least environmentally damaging practicable alternative, to the proposed discharge that would have less effects on waters of the U.S., and not have any other significant adverse environmental consequences. Per Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed

species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4.

2.2 State Laws and Requirements

Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This Act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the State. It predates the CWA and regulates discharges to waters of the State. Waters of the State include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined and this definition is broader than the CWA definition of "pollutant". Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details regarding water quality standards in a Project area are contained in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions, and then set criteria necessary to protect these uses. Consequently, the water quality standards developed for particular water segments are based on the designated use and vary depending on such use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants, which are then state-listed in accordance with CWA §303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-source point controls (NPDES permits or Waste Discharge Requirements), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB adjudicates water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

National Pollution Discharge Elimination System Program

Municipal Separate Storm Sewer Systems

§402(p) of the CWA requires the issuance of NPDES permits for five categories of stormwater dischargers, including MS4s. The U.S. EPA defines an MS4 as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that are designed or used for collecting or conveying stormwater."

The Central Valley RWQCB adopted a Region-wide MS4 Permit on 23 June 2016. Phase I MS4 permittees shall enroll under the Region-wide MS4 Permit as their current Individual permits expire and Phase II MS4 Permittees may choose to enroll. The County would submit a Notice of Intent (NOI) to obtain coverage under the General Permit for Discharges from Municipal Separate Storm Sewer Systems. The Central Valley RWQCB would review the NOI and determine if the County qualifies for coverage under the General Order. The County would then be assigned a General Order Number and a NPDES Permit Number.

Construction General Permit

Construction General Permit (CGP) (NPDES No. CAS000002, SWRCB Order No. 2009-0009-DWQ, adopted on November 16, 2010) became effective on February 14, 2011 and was amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. The permit regulates stormwater discharges from construction sites which result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development.

For all Projects subject to the CGP, the applicant is required to hire a Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD) to develop and implement an effective SWPPP. All Project Registration Documents, including the SWPPP, are required to be uploaded into the SWRCB's on-line Stormwater Multiple Application and Report Tracking System (SMARTS), at least 30 days prior to construction.

Waivers from CGP Coverage

Projects that disturb over 1.0 acre but less than 5 acres of soil, may qualify for waiver of CGP coverage. This occurs whenever the R factor of the Watershed Erosion Estimate (=R x K x LS) in tons/acre is less than 5. Within this CGP formula, there is a factor related to when and where the construction would take place. This factor, the 'R' factor, may be low, medium or high. When the R factor is below the numeric value of 5, Projects can be waived from coverage under the CGP, and are instead covered by the Caltrans Statewide MS4.

In accordance with the Stormwater Management Plan (SWMP), a Water Pollution Control Plan (WPCP) is necessary for construction of a Caltrans Project not covered by the CGP.

Construction activity that results in soil disturbances of less than one acre is subject to this CGP if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop a SWPPP, to implement soil erosion and pollution prevention control measures, and to obtain coverage under the CGP.

The CGP contains a risk-based permitting approach by establishing three levels of risk possible for a construction site. Risk levels are determined during the planning, design, and construction phases, and are based on Project risk of generating sediments and receiving water risk of becoming impaired. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) Project would require compulsory stormwater runoff pH and turbidity monitoring, and pre- and post-construction aquatic biological assessments during specified seasonal windows.

Section 401 Permitting

Under §401 of the CWA, any Project requiring a federal license or permit that may result in a discharge to a water of the United States must obtain a 401 Certification, which certifies that the Project would be in compliance with State water quality standards. The most common federal permit triggering 401 Certification is a CWA §404 permit, issued by USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the Project location, and are required before USACE issues a 404 permit.

In some cases, the RWQCB may have specific concerns with discharges associated with a Project. As a result, the RWQCB may issue a set of requirements known as WDRs under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a Project.

2.3 Regional and Local Requirements

The general objective for all waters of the Central Valley RWQCB is as follows:

The antidegradation directives of §13000 of the Water Code and State Water Board Resolution No. 68-16 ("Statement of Policy With Respect to Maintaining High Quality Waters in California") require that high quality waters of the State shall be maintained "consistent with the maximum benefit to the people of the State." The RWQCB applies these directives when issuing a permit, or in an equivalent process, regarding any discharge of waste which may affect the quality of surface or ground waters in the region.

Implementation of this policy to prevent or minimize surface and ground water degradation is a high priority for the RWQCB. In nearly all cases, preventing pollution before it happens is much more cost-effective than cleaning up pollution after it has occurred. Once degraded, surface water is often difficult to clean up when it has passed downstream. Likewise, cleanup of ground water is costly and lengthy due, in part, to its relatively low assimilative capacity and inaccessibility. The prevention of degradation is, therefore, an important strategy to meet the policy's objectives.

The RWQCB will apply Resolution No. 68-16 in considering whether to allow a certain degree of degradation to occur or remain. In conducting this type of analysis, the RWQCB will evaluate the nature of any proposed discharge, existing discharge, or material change therein, that could affect the quality of waters within the region. Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

Pursuant to this policy, a Report of Waste Discharge, or any other similar technical report required by the Board pursuant to Water Code §13267, must include information regarding the nature and extent of the discharge and the potential for the discharge to affect surface or ground water quality in the region. This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives. The extent of information necessary will depend on the specific conditions of the discharge. For example, use of best professional judgment and limited available information may be sufficient to determine that ground or surface water will not be

degraded. In addition, the discharger must identify treatment or control measures to be taken to minimize or prevent water quality degradation.

2.4 Regulatory Permits Required

Regulatory permits are required prior to impacts to jurisdictional waters of the U.S or State. The following regulatory permits were determined to be necessary for Project activities and would be obtained by the Project:

- CDFW §1602 Streambed Alteration Agreement
- RWQCB CWA §401 Water Quality Certification
- RWQCB NPDES Permit
- USACE §404 Nationwide Permit 14

3. Affected Environment

This Affected Environment section describes the environmental characteristics within the proposed Project area. Population, land use, topography, hydrology including regionally and locally, groundwater hydrology, geology/soils, biological communities, water quality standards, and beneficial uses are discussed.

3.1 General Environmental Setting

The Project is located in Tulare County. The Project is approximately 8 miles southeast of Fountain Springs. Population within the County is concentrated in cities such as Tulare, Visalia, and Porterville, and is directly correlated to land use. The topographic features in the Project vicinity are characterized by the southern Sierra Nevada foothills and its water features (which empty into the Central Valley). The Project area contains one existing water feature, White River. Groundwater is the main water supply in the area, with both urban and agricultural centers relying on its supply availability. White River, as one of the many streams running from the Sierra Nevada into the valley, contributes to this groundwater supply.

3.1.1 Population and Land Use

3.1.1.1 *Population*

The Project is within Tulare County, which, according to the 2019 U.S. Census, has a total population of 466,195. The population has grown approximately 5.4% since 2010. The population per square mile is approximately 91.7 people (U.S. Census 2019). The Project is located in an isolated rural area, with one occupied residence within the Project limits. As such, the population density in the Project vicinity is very low.

3.1.1.2 *Land Use*

The area surrounding the Project is located in unincorporated Tulare County with a land use designation of Foothill Agriculture, which includes agriculture fields within the Sierra Nevada foothills and rural residential homes (Tulare County 2020).

3.1.2 Topography

The Project site is within the White River United States Geological Survey (USGS) 7 ½ minute quadrangle (T24S & R29E, Section 28). The elevation within the Project site is approximately 1,080 to 1,150 feet above mean sea level.

3.1.3 Hydrology

3.1.3.1 *Regional Hydrology*

The proposed Project is within the Upper White-Upper Deer watershed, which is within the Tulare-Buena Vista Lakes Hydrologic Region.

3.1.3.2 *Local Hydrology*

Precipitation and Climate

The area is characterized by a southern Sierra Nevada foothills type climate with warm, dry summers, and cold, rainy winters. The average annual temperatures of the area range from a high of 70 degrees Fahrenheit to a low of 38 degrees Fahrenheit. The average annual precipitation is 17.87 inches (U.S. Climate Data 2020).

Surface Water Features

White River is located within the Project area (Figure 3. Waters and Vegetation Communities within the Project Area). White River originates approximately 15 miles east of the Project, at a higher elevation in the Sierra Nevada Mountains. The river runs for approximately 47 miles from this area into the Central Valley (USGS 2015). The river supplies (feeds) no major water bodies but has a number of seasonal tributaries.

Floodplains

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) designates the Project area as Zone A. Zone A indicates high risk flood areas, with a 1% annual chance of flooding (Appendix A. FEMA FIRMette Map). The Project is not located within a Central Valley Flood Protection Board (CVFPB) Designated Floodway (DF) nor is it within 30 feet from a Regulated Stream (CVFPB 2020). Although located within a high-risk flood area, the Project would not require a CVFPB permit due to its location outside of a DF and Regulated Stream.

Ground Water

The Project is located approximately five miles outside of the nearest groundwater basin, the Tule Groundwater Sub-basin. White River flows from east to west and ultimately drains to this groundwater basin. The Tule Groundwater Sub-basin is within the larger San Joaquin Valley Groundwater Basin (DWR 2019).

3.1.4 Geology/Soils

3.1.4.1 *Soil Erosion Potential*

Soil within the Project impact area consists of Blasingame sandy loam, 15 to 30 percent slopes (24.3%), Blasingame sandy loam, 30 to 50 percent slopes (57.1%), and Cieneba-Rock outcrop complex, 15 to 75 percent slopes (18.6%) (Appendix B. NRCS Soil Resource Report). The erodibility factor (K-factor) for this area is 0.2, indicating coarse textured soil with low runoff (USDA 2001). Erosion due to surface runoff is not anticipated in paved and/or proper sloped areas with controlled surface drainage facilities.

V:\2599.M019 White River\Biology\F4_VegComm_2020-11-13.mxd

Source: ESRI Maps Online; Dokken Engineering 12/4/2020; Created By: cfavro

1 inch = 125 feet

0 125 250 375 500 Feet

FIGURE 3
Waters and Vegetation Communities within the Project Area

BRLS-5946(170)
M109 over White River Bridge Replacement Project
White River, Tulare County, California

3.1.5 Biological Communities

3.1.5.1 *Aquatic Habitat*

On April 1, 2020, April 23, 2020, and May 14, 2020, Dokken Engineering associate biologist Andrew Dellas conducted a jurisdictional delineation of aquatic resources within the Project area. Delineation efforts determined that aquatic resources within the Project area include White River, associated seasonal wetlands, and riparian woodland habitat. Approximately 596 linear feet of White River occurs within the Project area, at approximately 2- to 18-foot widths. Within the Project area, seasonal wetland habitat occurs in two small areas immediately adjacent to the White River channel just west of the existing M109 bridge. A riparian woodland corridor is found along the banks of White River, with a canopy dominated by trees such as willows (*Salix spp.*), California buckeye (*Aesculus californica*), and California sycamore (*Platanus racemosa*).

3.1.5.2 *Special Status Species*

Dokken Engineering biologists prepared the Project's Natural Environment Study Minimal Impacts (NESMI), completing literature research and habitat assessments which concluded that one special status species [Crotch bumble bee (*Bombus crotchii*)] would have a low to moderate potential of occurring within the Project's Biological Study Area (BSA).

In April and May 2020, Dokken Engineering biologists completed protocol level botanical surveys for special status plant species. Survey results determined that no special status plant species occur within the Project's BSA. The Botanical Survey Report is included in the NESMI for further reference of survey methods and results.

3.1.5.3 *Stream/Riparian Habitats*

The Project area contains White River, which contains seasonally wetted riverine habitat. The river potentially provides habitat for a number of wildlife species. In addition, the river supports a small area of seasonal wetland and a large riparian woodland corridor that provide ample habitat for wildlife. Within the BSA, White River, seasonal wetland, and riparian woodland are the key natural communities which currently have the potential to support plant and wildlife species particular to this area.

3.1.5.4 *Fish Passage*

White River within the Project area is outside of National Marine Fisheries Service (NMFS) jurisdiction and does not contain Essential Fish Habitat (EFH). Additionally, the Project area does not contain Critical Habitat for any fish species. White River is seasonally wet and cannot support fish movement during the dry season, when the riverbed is dry and sandy. When the river channel is wetted, it has the potential to support aquatic plants, invertebrates, and small fish species. Within the BSA, White River may support migration of some fish species during select times of the year; however, the river lacks sufficient conditions to serve as an important regional fish migration passage.

3.2 Water Quality Objective/Standards and Beneficial Uses

3.2.1 Surface Water Quality Objectives/Standards and Beneficial Uses

Water quality is most affected by land development, agriculture, grazing, and urban runoff. Constituents found urban runoff vary during storm events, from event to event within a given area, and from area to area within a given watershed. Variances can be the result of differences in rainfall intensity and occurrence, geographic features, the land use of the area, vehicle traffic, and the percentage of impervious surface. Furthermore, sediment runoff from construction sites without adequate erosion control measures can contribute sediments, pesticides, fertilizers, and other contaminants to receiving waters.

As required by the Porter-Cologne Act, the Central Valley RWQCB has developed water quality objectives for waters within their jurisdiction to protect the beneficial uses of those waters and published them in a Basin Plan. The Tulare Lake Basin Plan also establishes implementation programs to achieve these water quality objectives and requires monitoring to evaluate the effectiveness of these programs. Water quality objectives must comply with the state anti-degradation policy (State Water Board Resolution No. 68-16), which generally restricts the reduction of water quality of surface or ground waters even though such a reduction in water quality might still allow the protection of the beneficial uses associated with the water prior to the quality reduction. The Central Valley RWQCB intends to maintain this quality with enforcement of the water quality objectives summarized in Table 1 (Central Valley RWQCB 2018).

Table 1. Central Valley RWQCB Water Quality Objectives for Inland Surface Waters

Constituent	Water Quality Objective
Ammonia	Waters shall not contain un-ionized ammonia in amounts which adversely affect beneficial uses. In no case shall the discharge of wastes cause concentrations of un-ionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters.
Bacteria	In waters designated REC-1, the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200/100 ml, nor shall more than ten percent of the total number of samples taken during any 30-day period exceed 400/100 ml.
Biostimulatory Substances	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
Chemical Constituents	Waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses. The Regional Water Board will consider all material and relevant information submitted by the discharger and other interested parties and numerical criteria and guidelines for detrimental levels of chemical constituents developed by the State Water Board, the California Office of Environmental Health Hazard Assessment, the State Water Board Division of Drinking Water Programs, the U.S. Food and Drug Administration, the National Academy of Sciences, the U. S. Environmental Protection Agency, and other appropriate organizations to evaluate compliance with this objective. At a minimum, water designated MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of Title 22 of the

Table 1. Central Valley RWQCB Water Quality Objectives for Inland Surface Waters

<table>
<tr><th>Constituent</th><th>Water Quality Objective</th></tr>
<tr><td></td><td>California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Table 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. At a minimum, water designated MUN shall not contain lead in excess of 0.015 mg/l. The Regional Water Board acknowledges that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters under specific circumstances. To ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses, the Regional Water Board may apply limits more stringent than MCLs.</td></tr>
<tr><td>Color</td><td>Waters shall be free of discoloration that causes nuisance or adversely affects beneficial uses.</td></tr>
<tr><td>Dissolved Oxygen</td><td>Waste discharges shall not cause the monthly median dissolved oxygen concentrations (DO) in the main water mass (at centroid of flow) of streams and above the thermocline in lakes to fall below 85 percent of saturation concentration, and the 95 percentile concentration to fall below 75 percent of saturation concentration. The DO in surface waters shall always meet or exceed the concentrations in Table 3-1 for the listed specific water bodies and the following minimum levels for all aquatic life:
Waters designated WARM 5.0 mg/l
Waters designated COLD or SPWN 7.0 mg/l
Where ambient DO is less than these objectives, discharges shall not cause a further decrease in DO concentrations.

TABLE 3-1 TULARE LAKE BASIN SPECIFIC DISSOLVED OXYGEN WATER QUALITY OBJECTIVES
<table>
<tr><th>Stream</th><th>Location</th><th>Min. DO (mg/l)</th></tr>
<tr><td>Kings River</td><td></td><td></td></tr>
<tr><td>Reach I</td><td>Above Kirch Flat</td><td>9</td></tr>
<tr><td>Reach II</td><td>Kirch Flat to Pine Flat Dam</td><td>9</td></tr>
<tr><td>Reach III</td><td>Pine Flat Dam to Friant-Kern</td><td>9</td></tr>
<tr><td>Reach IV</td><td>Friant-Kern to Peoples Weir</td><td>7</td></tr>
<tr><td>Reach V</td><td>Peoples Weir to Island Weir</td><td>7</td></tr>
<tr><td>Kaweah River</td><td>Lake Kaweah</td><td>7</td></tr>
<tr><td>Tule River</td><td>Lake Success</td><td>7</td></tr>
<tr><td>Kern River</td><td></td><td></td></tr>
<tr><td>Reach I</td><td>Above Lake Isabella</td><td>8</td></tr>
<tr><td>Reach II</td><td>Lake Isabella to Southern California Edison Powerhouse (KR-1)</td><td>8</td></tr>
</table></td></tr>
<tr><td>Floating Material</td><td>Waters shall not contain floating material, including but not limited to solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.</td></tr>
</table>

Table 1. Central Valley RWQCB Water Quality Objectives for Inland Surface Waters

Constituent	Water Quality Objective
Oil and Greases	Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.
pH	The pH of water shall not be depressed below 6.5, raised above 8.3, or changed at any time more than 0.3 units from normal ambient pH. In determining compliance with the above limits, the Regional Water Board may prescribe appropriate averaging periods provided that beneficial uses will be fully protected.
Pesticides	Waters shall not contain pesticides in concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses. (For the purposes of this objective, the term pesticide is defined as any substance or mixture of substances used to control objectionable insects, weeds, rodents, fungi, or other forms of plant or animal life.) The Regional Water Board will consider all material and relevant information submitted by the discharger and other interested parties and numerical criteria and guidelines for detrimental levels of chemical constituents developed by the State Water Board, the California Office of Environmental Health Hazard Assessment, the State Water Board Division of Drinking Water Programs, the U.S. Food and Drug Administration, the National Academy of Sciences, the U. S. Environmental Protection Agency, and other appropriate organizations to evaluate compliance with this objective. At a minimum, waters designated MUN shall not contain concentrations of pesticide constituents in excess of the maximum contaminant levels (MCLs) specified in Table 64444-A (Organic Chemicals) of Section 64444 of Title 22 of the California Code of Regulations, which is incorporated by reference into this plan. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. The Regional Water Board acknowledges that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters under specific circumstances. To ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses, the Regional Water Board may apply limits more stringent than MCLs. In waters designated COLD, total identifiable chlorinated hydrocarbon pesticides shall not be present at concentrations detectable within the accuracy of analytical methods prescribed in Standard Methods for the Examination of Water and Wastewater, 18th Edition, or other equivalent methods approved by the Executive Officer.
Radioactivity	Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life nor which result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. At a minimum, waters designated MUN shall not contain concentrations of radionuclides in excess of the maximum contaminant levels (MCLs) specified in Table 64442 of Section

Table 1. Central Valley RWQCB Water Quality Objectives for Inland Surface Waters

Constituent	Water Quality Objective
	64442 and Table 64443 of Section 64443 of Title 22, California Code of Regulations, which are incorporated by reference into this plan. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect.
Salinity	Waters shall be maintained as close to natural concentrations of dissolved matter as is reasonable considering careful use of the water resources. "The only reliable way to determine the true or absolute salinity of a natural water is to make a complete chemical analysis. However, this method is time-consuming and cannot yield the precision necessary for accurate work" {Standard Methods for the Examination of Water and Wastewater, 18th Edition}. Conductivity is one of the recommended methods to determine salinity. The objectives for electrical conductivity in Table 3-2 apply to the water bodies specified. Table 3-3 specifies objectives for electrical conductivity at selected streamflow stations. Table 3-2 and Table 3-3 can be found in the Central Valley RWQCB 2018 Tulare Lake Basin Plan.
Sediment	The suspended sediment load and suspended sediment discharge rate of waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
Settleable Material	Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.
Suspended Material	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
Tastes and Odors	Waters shall not contain taste- or odor-producing substances in concentrations that cause nuisance, adversely affect beneficial uses, or impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to domestic or municipal water supplies.
Temperature	Natural temperatures of waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California, including any revisions. (See Appendix 10.) Elevated temperature wastes shall not cause the temperature of waters designated COLD or WARM to increase by more than 5°F above natural receiving water temperature. In determining compliance with the above limits, the Regional Water Board may prescribe appropriate averaging periods provided that beneficial uses will be fully protected.
Toxicity	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances. Compliance with

Table 1. Central Valley RWQCB Water Quality Objectives for Inland Surface Waters

Constituent	Water Quality Objective
	this objective will be determined by analyses of indicator organisms, species diversity, population density, growth anomalies, biotoxicity tests of appropriate duration, or other methods as specified by the Regional Water Board. The Regional Water Board will also consider all material and relevant information submitted by the discharger and other interested parties and numerical criteria and guidelines for toxic substances developed by the State Water Board, the California Office of Environmental Health Hazard Assessment, the State Water Board Division of Drinking Water Programs the U.S. Food and Drug Administration, the National Academy of Sciences, the U. S. Environmental Protection Agency, and other appropriate organizations to evaluate compliance with this objective. The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors shall not be less than that for the same water body in areas unaffected by the waste discharge, or, when necessary, for other control water that is consistent with the requirements for "dilution water" as described in Standard Methods for the Examination of Water and Wastewater, 18th Edition. As a minimum, compliance shall be evaluated with a 96-hour bioassay. In addition, effluent limits based upon acute biotoxicity tests of effluents will be prescribed where appropriate; additional numerical receiving water quality objectives for specific toxicants will be established as sufficient data become available; and source control of toxic substances will be encouraged.
Turbidity	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributable to controllable water quality factors shall not exceed the following limits: • Where natural turbidity is between 0 and 5 Nephelometric Turbidity Units (NTUs), increases shall not exceed 1 NTU. • Where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent. • Where natural turbidity is equal to or between 50 and 100 NTUs, increases shall not exceed 10 NTUs. • Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent. In determining compliance with the above limits, the Regional Water Board may prescribe appropriate averaging periods provided that beneficial uses will be fully protected.

Source: Central Valley RWQCB 2018

Under the Porter-Cologne Water Quality Control Act, the RWQCB is required to consider beneficial uses when instituting water quality objectives and described these beneficial uses as follows:

"Beneficial uses of the waters of the State that may be protected against quality degradation include, but are not necessarily limited to, domestic, municipal, agricultural, and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves."

The RWQCB defines beneficial uses into two categories: consumptive uses corresponding to reduction and/or depletion of water supply and non-consumptive uses not associated with significantly depleting water supplies. The only identified existing beneficial use of surface waters within White River is “Warm Freshwater Habitat” (WARM), which is defined as uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates (Central Valley RWQCB 2018).

3.2.2 Groundwater Quality Objectives/Standards and Beneficial Uses

The key groundwater quality objective for the Central Valley RWQCB is to minimize the contaminants reaching any groundwater basin within the region. The goals are to control taste and odors, keep bacteriological, radioactive, chemical contaminants below the regulatory limits, and prohibit discharges of toxic wastes. Table 2 below summarizes these water quality objectives for the region, as outlined by the Central Valley RWQCB.

Beneficial uses of groundwater in the Tulare Lake Basin Plan are considered as suitable or potentially suitable, at a minimum, for municipal and domestic supply (MUN) and agriculture supply (AGR) (Central Valley RWQCB 2018).

Table 2. Central Valley RWQCB Water Quality Objectives for Groundwaters

Constituent	Water Quality Objective
Bacteria	In ground waters designated MUN, the concentration of total coliform organisms over any 7-day period shall be less than 2.2/100 ml.
Chemical Constituents	Ground waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses. The Regional Water Board will consider all material and relevant information submitted by the discharger and other interested parties and numerical criteria and guidelines for detrimental levels of chemical constituents developed by the State Water Board, the California Office of Environmental Health Hazard Assessment, the State Water Board Division of Drinking Water Programs, the U.S. Food and Drug Administration, the National Academy of Sciences, the U. S. Environmental Protection Agency, and other appropriate organizations to evaluate compliance with this objective. At a minimum, waters designated MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Table 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. At a minimum, water designated MUN shall not contain lead in excess of 0.015 mg/l. To ensure that waters do not contain chemical constituents in concentrations that adversely affect

Table 2. Central Valley RWQCB Water Quality Objectives for Groundwaters

Constituent	Water Quality Objective
	beneficial uses, the Regional Water Board may apply limits more stringent than MCLs.
Pesticides	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. At a minimum, waters designated MUN shall not contain concentrations of pesticide constituents in excess of the maximum contaminant levels (MCLs) specified in Table 64444-A (Organic Chemicals) of Section 64444 of Title 22 of the California Code of Regulations, which is incorporated by reference into this plan. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. The Regional Water Board acknowledges that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters under specific circumstances. More stringent objectives may apply if necessary to protect other beneficial uses.
Radioactivity	Radionuclides shall not be present in ground waters in concentrations that are deleterious to human, plant, animal, or aquatic life, or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal or aquatic life. At a minimum, ground waters designated MUN shall not contain concentrations of radionuclides in excess of the maximum contaminant levels (MCLs) specified in Table 64442 of Section 64442 and Table 64443 of Section 64443 of Title 22, California Code of Regulations, which are incorporated by reference into this plan. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect.
Salinity	All ground waters shall be maintained as close to natural concentrations of dissolved matter as is reasonable considering careful use and management of water resources, except for those areas with specific beneficial use exceptions as listed in Table 2-3. No proven means exist at present that will allow ongoing human activity in the Basin and maintain ground water salinity at current levels throughout the Basin. Accordingly, the water quality objectives for ground water salinity control the rate of increase. The maximum average annual increase in salinity measured as electrical conductivity shall not exceed the values specified in Table 3-4 for each hydrographic unit shown on Figure 3-1, except for those areas with specific beneficial use exceptions as listed in Table 2-3. The average annual increase in electrical conductivity will be determined from monitoring data by calculation of a cumulative average annual increase over a 5-year period. Table 2-3, Table 3-4, and Figure 3-1 can be found in the Central Valley RWQCB 2018 Tulare Lake Basin Plan.
Tastes and Odors	Ground waters shall not contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

Table 2. Central Valley RWQCB Water Quality Objectives for Groundwaters

Constituent	Water Quality Objective
Toxicity	Ground waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial use(s). The Regional Water Board will also consider all material and relevant information submitted by the discharger and other interested parties and numerical criteria and guidelines for toxic substances developed by the State Water Board, the California Office of Environmental Health Hazard Assessment, the State Water Board Division of Drinking Water Programs, the U.S. Food and Drug Administration, the National Academy of Sciences, the U. S. Environmental Protection Agency, and other appropriate organizations to evaluate compliance with this objective. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances.

Source: Central Valley RWQCB 2018

3.3 Existing Water Quality

3.3.1 List of Impaired Waters

White River within the Project area is not 303(d) listed and considerations for TMDLs are not necessary (U.S. EPA 2016).

3.3.2 Areas of Special Biological Significance

According to the map provided by the SWRCB (SWRCB 2017), there are no Areas of Special Biological Significance (ASBS) within the Project limits.

4. Environmental Consequences

4.1 Introduction

The proposed Project would reduce impervious surface area. The existing bridge is located on a turn which would be removed by the new bridge and new, straighter road alignment. The surface of the new bridge (approximately 2,650 square feet) is larger than the existing bridge (approximately 630 square feet); however, approximately 3,960 square feet of the old roadway will be removed and the new, straighter roadway alignment will only add approximately 990 square feet of impervious surface. In total, 4,590 square feet or 0.10 acres of impervious surface will be removed, and 3,640 square feet or 0.08 acres of impervious surface will be added to the Project area. Overall, there will be a net decrease in impervious surfaces of approximately 950 square feet or 0.02 acres. The decrease in impervious surface area within the Project area would contribute to a decrease of storm water runoff.

Roadways may contain oil, grease, petroleum products, zinc, copper, lead, cadmium, iron, and other trace metals, which could harm aquatic wildlife inhabiting White River and the associated habitat around it. Concentrations of these pollutants in storm water runoff would be greatest during the “first flush” storm event, generally the first major rains of the season. Due to the low frequency of traffic, concentrations of these pollutants would be minimal at the Project location. Additional water quality impacts may result from sediment-laden storm water naturally discharged into White River.

The Project would result in permanent and temporary impacts to biological aquatic resources within the Project area, including riverine channel, seasonal wetland, and riparian habitat. These impacts would be reduced to the greatest extent feasible and the Project would be designed in such a way that impacts to White River would not alter the long-term hydrologic function of the river. Water quality and hydrologic function of White River would not be negatively affected by physical impacts to White River.

4.2 Potential Impacts to Water Quality

4.2.1 Long Term Impacts and Anticipated Changes to the Physical/Chemical Characteristics of the Aquatic Environment

4.2.1.1 *Suspended Particulates (Turbidity)*

The Project storm water drainage would be designed consistent with applicable local jurisdiction requirements and the Caltrans Project Planning and Design Guide and SWMP. As a result, the Project is not anticipated to produce long-term effects on turbidity.

4.2.1.2 *Oil, Grease and Chemical Pollutants*

The new replacement bridge and new alignment would be designed consistent with local jurisdiction requirements and the Caltrans Project Planning and Design Guide and SWMP. Based on preliminary design, the Project would have an addition of approximately 0.08 acres of impervious surface; however, if the existing bridge and all existing pavement from the old roadway alignment is removed from conform to conform (approximately 0.10 acres of impervious surface), the Project would have a net benefit of 0.02 acres of reduced impervious surfaces. During final design, the Project would be designed to accommodate the necessary drainage capacity, to

handle the additional runoff created by the increase in impervious surfaces, or to accommodate the removal of impervious surfaces within the Project area. Roadways runoff may contain oil, grease, petroleum products, zinc, copper, lead, cadmium, iron, and other trace metals, which could harm aquatic life. Accidental spills of petroleum hydrocarbons (fuels and lubricating oils) and/or concrete waste, are also a concern during construction activities, and would be avoided and/or minimized through the implementation of construction and water quality BMPs. An accidental release of these wastes could adversely affect surface water quality, vegetation, and wildlife habitat, but the impact is anticipated to be acute and not cause a long-term impact. Such potential short-term construction impacts would be avoided and minimized through BMPs included in Avoidance and Minimization Measure **WQ-1**.

The Project would reduce impervious surface area, which would decrease runoff into White River. With combined decrease in runoff and low traffic volume on M109, the Project is not anticipated to create nor result in a substantial increase in pollutants into the river. In addition, White River is not a 303(d) listed impaired water body and no TMDL has been established where adherence is required.

4.2.1.3 *Flood Control Functions*

A Location Hydraulic Study will be prepared and will address flood control functions.

4.2.2 Anticipated Changes to the Biological Characteristics of the Aquatic Environment

Waters, wetlands, and riparian areas adjacent to the river would be permanently impacted due to the size increase of the replacement bridge, the construction and placement of new approach roadway, and the redirection of a small segment of White River which currently flows immediately adjacent to the existing road. These activities are anticipated to have approximately 0.046 acres of net permanent impacts to White River, 0.0002 acres of permanent impacts to seasonal wetland, and 0.106 acres of permanent impacts to riparian woodland habitat. In addition to permanent impacts, temporary impacts are anticipated as a result of demolition of the existing bridge, construction access, and minimal vegetation removal, which would be offset by measures discussed in the NESMI. Anticipated temporary impacts to waters, wetlands, and riparian areas adjacent to the river include approximately 0.048 acres to White River, 0.014 acres to seasonal wetland, and 0.226 acres to riparian woodland; respectively.

The most substantial change to the aquatic environment would be the redirection of water flow in a small segment of White River, which would ultimately be beneficial as it would reduce potential erosion to M109 and the surrounding slopes. This would be offset by the widening of other segments of White River in order to maintain hydraulic capacity and function of the river at this location. Due to the creation of more riverine habitat, disturbance of White River water flow would be temporary, and the capacity, function, and habitat availability of the river would remain the same or similar to the original conditions of the river (Figure 4. Project Impacts to Sensitive Natural Habitats).

Disturbance and potential impacts to White River, seasonal wetland, and riparian vegetation would be minimized to the greatest extent practicable. BMPs and Avoidance and Minimization Measures **WQ-1** through **WQ-3** are anticipated to minimize changes to the biological characteristics of the aquatic environment. In addition, impacts to White River, seasonal wetland, and riparian woodland are discussed in the NESMI.

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Project Impact Area (~6.81 acres)

Design Features

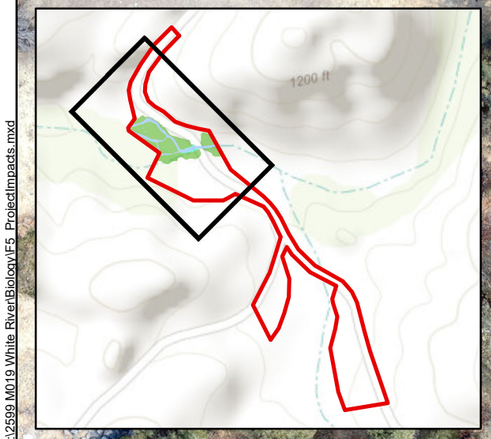
- Existing M109 White River Bridge
- Pavement Edges
- Proposed M109 White River Bridge
- Cut and Fill Lines

Sensitive Natural Communities

- Riparian Woodland (~0.73 acres)
- Seasonal Wetland (~0.02 acres)
- Riverine (~0.18 acres)

Impacts to Sensitive Natural Communities

- Riparian Permanent Impact (~0.106 acres)
- Riverine Permanent Impact (~0.074 acres)
- Wetland Permanent Impact (~0.0002 acres)
- Riverine Gain (~0.028 acres)
- Riparian Temporary Impact (~0.226 acres)
- Riverine Temporary Impact (~0.048 acres)
- Wetland Temporary Impact (~0.014 acres)



V:\2599.M019.White River\Biology\F5_ProjectImpacts.mxd

Source: ESRI Maps Online; Dokken Engineering 12/4/2020; Created By: cfavro

1 inch = 50 feet

0 50 100 150 200 Feet

FIGURE 4
Project Impacts to Sensitive Natural Habitats

BRLS-5946(170)
M109 over White River Bridge Replacement Project
White River, Tulare County, California

4.2.3 Anticipated Changes to the Human Use Characteristics of the Aquatic Environment

White River functions as a regional waterway which collects water draining from the southern Sierra Nevada and its foothills. Human uses, such as recreation, navigation or conservation are not primary functions of White River within the Project area. No changes to human uses would occur and the river would continue to convey water through the region.

Given the characteristics of this transportation Project, and the existing conditions of White River, existing and potential water supplies, water conservation, recreation, navigation, and aesthetics are not likely to be adversely impacted as a result of the Project. The Project is anticipated to have a positive impact on safety in the Project area.

4.2.4 Short Term Impacts During Construction

4.2.4.1 *Physical/Chemical Characteristics of the Aquatic Environment*

Construction-related activities associated with the Project would include disturbances to the ground surface from earthwork, including excavation and demolition of the existing bridge. Materials used during construction-related activities of the Project (e.g., concrete curing compounds) could have chemicals that are potentially harmful to water quality. Accidents or improper use of these materials could result in the release of contaminants into the environment, including the river itself. Such potential short-term impacts would be avoided and minimized through measure **WQ-1**. Additionally, oil and other petroleum products used to maintain and operate construction-related equipment could be accidentally released. However, such potential short-term impacts would be avoided and minimized through standard BMPs would be included in the Project to avoid or minimize the release of pollutants, including chemical toxins, into the environment during construction. Construction-related areas would be protected to prevent items from entering the waterway.

4.2.4.2 *Biological Characteristics of the Aquatic Environment*

Temporary disturbances to the aquatic environment related to construction may occur, such as increased noise, dust, and trash, which could impact the quality of aquatic habitat within the Project area. These impacts would be short term and have been addressed through measures noted in the NESMI. In addition, the temporary impacts to White River, seasonal wetland, and riparian woodland, outlined in Section 4.2.2, would be mitigated for as outlined in the NESMI and the area would be allowed to return to pre-construction conditions following the completion of work.

4.2.4.3 *Human Use Characteristics of the Aquatic Environment*

No short-term impacts to the human use characteristics of the aquatic environment are anticipated.

4.3 Cumulative Impacts

Net impervious surface area would be decreased as a result of the Project. In addition, the Project would be designed consistent with local requirements and the Caltrans Project Planning and Design Guide and SWMP. To reduce potential runoff, site design BMPs would be incorporated during final design as described in **WQ-1**. To further avoid and/or minimize impacts to White River

and water quality, measures **WQ-2** through **WQ-5** would be incorporated during final design. The new replacement bridge and improved approach roadways would require the removal of native riparian trees and shrubs; however, the Project would preserve the maximum amount of existing vegetation and utilize the minimum width roadway allowed by current design standards. The Project would improve M109 and the M109 bridge, creating a safe crossing over White River. Other potential cumulative impacts such as increases in water temperature, litter, or invasive species are not anticipated.

The Project anticipates both permanent and temporary impacts to White River, seasonal wetland, and riparian woodland habitat within the Project area. However, the proposed Project has been designed to minimize all permanent and temporary impacts to the maximum extent practicable through the use of BMPs and implementation of regulatory permit conditions. Additionally, biological and special-status species measures stated within the NESMI and final permits would be incorporated to minimize and avoid impacts to these biological characteristics.

5. Avoidance and Minimization Measures

WQ-1: BMPs would be incorporated into Project design and Project management to minimize impacts on the environment including the release of pollutants (oils, fuels, etc.):

- The area of construction and disturbance would be limited to as small an area as feasible to reduce erosion and sedimentation.
- Measures would be implemented during land-disturbing activities to reduce erosion and sedimentation. These measures may include mulches, soil binders and erosion control blankets, silt fencing, fiber rolls, temporary berms, sediment desilting basins, sediment traps, and check dams.
- Existing vegetation would be protected where feasible to reduce erosion and sedimentation. Vegetation would be preserved by installing temporary fencing, or other protection devices, around areas to be protected.
- Exposed soils would be covered by loose bulk materials or other materials to reduce erosion and runoff during rainfall events.
- Exposed soils would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction-related activities such as traffic and grading activities. The Project would comply with the Valley Air District's Regulation VIII (Fugitive PM10 Prohibitions).
- All construction roadway areas would be properly and effectively protected to prevent excess erosion, sedimentation, and water pollution.
- All vehicle and equipment maintenance procedures would be conducted off-site. In the event of an emergency, maintenance would occur away from White River.
- All concrete curing activities would be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly.
- All construction materials, vehicles, stockpiles, and staging areas, to the extent feasible, would be situated outside of the stream channel as feasible. All stockpiles, to the extent feasible, would be covered.
- Energy dissipaters and erosion control pads would be provided at the bottom of slope drains. Other flow conveyance control mechanisms may include earth dikes, swales, or ditches. Stream bank stabilization measures would also be implemented.
- All erosion control measures and storm water control measures would be properly and effectively maintained until final grading has occurred and permanent storm water measures are in place.
- All disturbed areas would be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native or approved non-invasive exotic species.

- All construction-related materials (such as equipment, waste, or excess materials) would be hauled off-site after completion of construction and disposed of or stored at proper disposal and/or storage facilities.

WQ-2: Any requirements for additional avoidance, minimization, and/or mitigation measures from all required regulatory agencies will be adhered to.

WQ-3: The Project limits in proximity to White River, seasonal wetland, and riparian woodland will be marked as an Environmental Sensitive Area (ESA) or either be staked or fenced with high visibility material to ensure construction activities will not encroach further beyond established limits.

WQ-4: The construction contractor will adhere to the NPDES Permit pursuant to §402 of the CWA. This permit authorizes storm water and authorized non-storm water discharges from construction-related activities. As part of this Permit requirement, a SWPPP or Water Pollution Control Plan (if ground disturbance is less than 1 acre) will be prepared prior to construction consistent with the requirements of the RWQCB. This SWPPP/Water Pollution Control Plan will incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality.

WQ-5: Storm water systems will be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources.

6. References

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Appendix A. FEMA FIRM Map

National Flood Hazard Layer FIRMette

FEMA

118°51'3"W 35°49'2"N

118°50'25"W 35°48'33"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/28/2020 at 5:21 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Appendix B. NRCS Soil Report

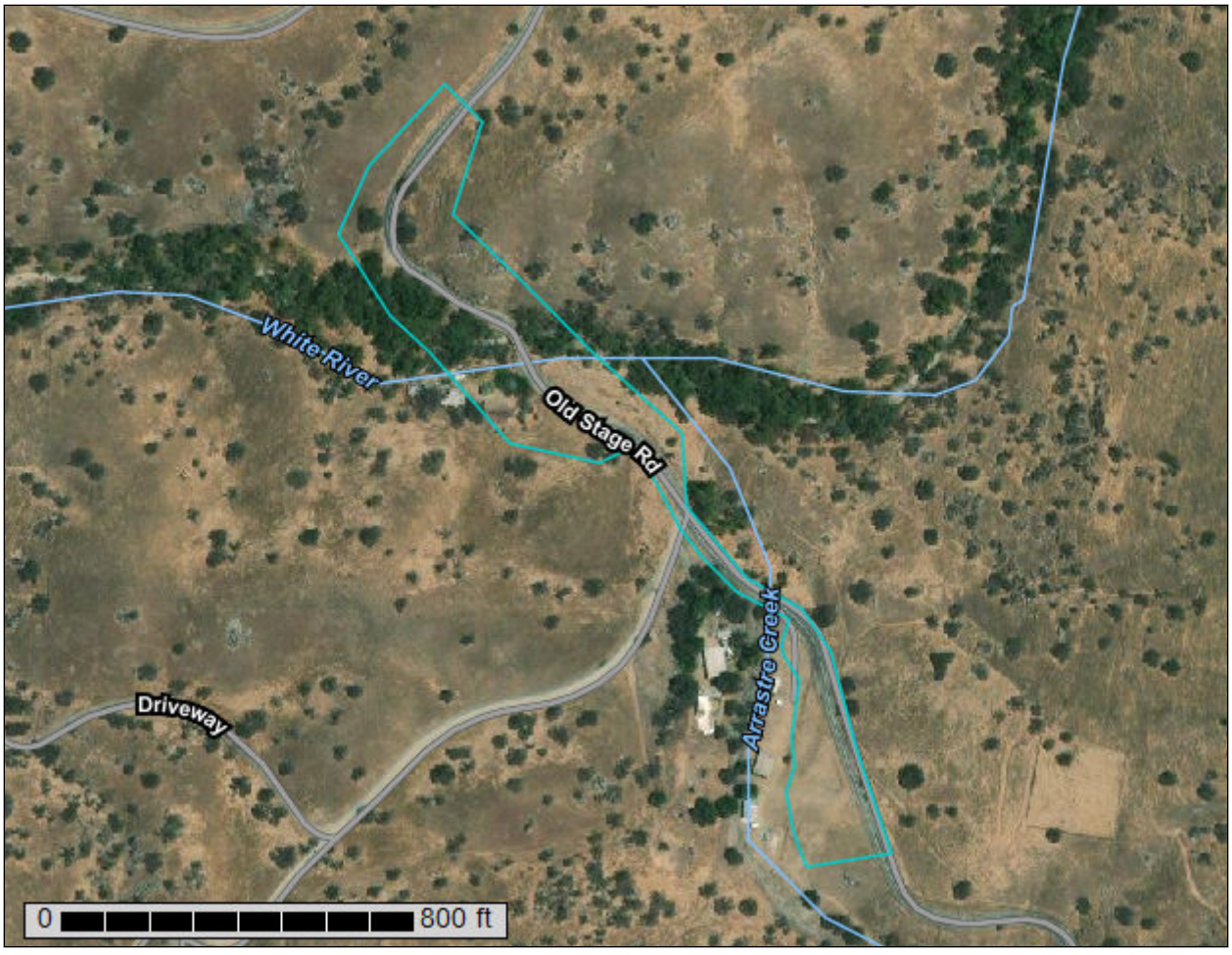
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Tulare County, California, Central Part



November 3, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:3,160 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 45 90 180 270

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Tulare County, California, Central Part
Survey Area Data: Version 14, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 15, 2016—Nov 5, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106	Blasingame sandy loam, 15 to 30 percent slopes	2.0	24.3%
107	Blasingame sandy loam, 30 to 50 percent slopes	4.6	57.1%
116	Cieneba-Rock outcrop complex, 15 to 75 percent slopes	1.5	18.6%
Totals for Area of Interest		**8.1**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Tulare County, California, Central Part

106—Blasingame sandy loam, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: hkcx
Elevation: 500 to 3,500 feet
Mean annual precipitation: 12 to 32 inches
Mean annual air temperature: 55 to 62 degrees F
Frost-free period: 150 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition

Blasingame and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blasingame

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Quartz residuum weathered from diorite

Typical profile

A - 0 to 7 inches: sandy loam
Bt - 7 to 36 inches: sandy clay loam, clay loam, loam
Bt - 7 to 36 inches: bedrock
Bt - 7 to 36 inches:
Cr - 36 to 60 inches:

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very high (about 14.6 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: R018XE003CA - Coarse Loamy
Hydric soil rating: No

Minor Components

Fallbrook
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Auberry
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Cieneba
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Vista
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Unnamed, finer subsoil
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Unnamed, bouldery
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

107—Blasingame sandy loam, 30 to 50 percent slopes

Map Unit Setting
National map unit symbol: hkcy
Elevation: 400 to 4,500 feet
Mean annual precipitation: 9 to 25 inches
Mean annual air temperature: 57 to 66 degrees F
Frost-free period: 150 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition
Blasingame and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blasingame

Setting
Landform: Hills

Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from quartz-diorite

Typical profile

A - 0 to 7 inches: sandy loam
Bt - 7 to 36 inches: sandy clay loam, clay loam, loam
Bt - 7 to 36 inches:
Bt - 7 to 36 inches:

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very high (about 14.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: R018XE003CA - Coarse Loamy
Hydric soil rating: No

Minor Components

Auberry

Percent of map unit: 4 percent
Hydric soil rating: No

Cieneba

Percent of map unit: 4 percent
Hydric soil rating: No

Fallbrook

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed, finer subsoil

Percent of map unit: 4 percent
Hydric soil rating: No

Vista

Percent of map unit: 4 percent
Hydric soil rating: No

116—Cieneba-Rock outcrop complex, 15 to 75 percent slopes

Map Unit Setting

National map unit symbol: hkd7
Elevation: 500 to 4,000 feet
Mean annual precipitation: 12 to 35 inches
Mean annual air temperature: 57 to 64 degrees F
Frost-free period: 200 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Cieneba and similar soils: 55 percent
Rock outcrop: 30 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cieneba

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Concave
Across-slope shape: Convex, concave
Parent material: Residuum weathered from granitoid

Typical profile

A - 0 to 16 inches: coarse sandy loam
Cr - 16 to 60 inches: weathered bedrock

Properties and qualities

Slope: 15 to 75 percent
Depth to restrictive feature: 10 to 20 inches to paralithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R018XE029CA - SHALLOW COARSE LOAMY
Hydric soil rating: No

Description of Rock Outcrop

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8e
Hydric soil rating: No

Minor Components

Unnamed, dark color

Percent of map unit: 4 percent
Hydric soil rating: No

Vista

Percent of map unit: 4 percent
Hydric soil rating: No

Blasingame

Percent of map unit: 4 percent
Hydric soil rating: No

Walong

Percent of map unit: 3 percent
Hydric soil rating: No

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Attachment "G"

Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program

Mitigation Measure		When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
						Initials	Date	Remarks
AESTHETICS								
See Mitigation Measures BIO-4 and BIO-15								
BIOLOGICAL RESOURCES								
BIO-1	Contract specifications will include the following BMPs, where applicable, to reduce erosion during construction: • Implementation of the project will require approval of a site-specific Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Plan (WPCP [if ground disturbance is less than 1 acre]) that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques; • Existing vegetation would be protected where feasible to provide an effective form of erosion and sediment control; • Exposed soils would be covered by loose bulk materials or other materials to reduce erosion and runoff during rainfall events. • Exposed soils would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction-related activities such as traffic and grading activities. • All concrete curing activities would be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly. • All construction-related materials, vehicles, stockpiles, and staging areas would be situated outside of the stream channel as feasible. All stockpiles would be covered, as feasible. • All erosion control measures and storm water control measures would be properly maintained until final grading has been	Prior to start and during construction.	Throughout construction.	County of Tulare				

Mitigation Monitoring and Reporting Program

Mitigation Measure		When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
						Initials	Date	Remarks
	completed and permanent erosion control measures are implemented. • All disturbed areas would be restored to pre-construction contours and revegetated, where applicable, either through hydroseeding or other means, with native or approved non-invasive exotic species. • All construction-related materials (such as equipment, waste, or excess materials) would be hauled off-site after completion of construction and disposed of or stored at proper disposal and/or storage facilities.							
BIO-2	Prior to the start of construction-related activities, the Project limits in proximity to White River, seasonal wetlands, and riparian woodland must be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into waters or sensitive habitats. In particular, seasonal wetlands will be protected to the extent feasible. The Project biologist will monitor the installation of ESA fencing and will periodically inspect the ESA to ensure sensitive locations remain undisturbed.	Prior to start of construction.	Throughout construction.	County of Tulare				
BIO-3	Refueling or maintenance of equipment without secondary containment shall not be permitted to occur on the within 100 feet of the White River channel. All refueling and maintenance that must occur within 100 feet of the river must occur over plastic sheeting or other secondary containment measures to capture accidental spills before they can contaminate the soil. Secondary containment must have a raised edge (e.g.; sheeting wrapped around wattles).	Prior to start and during construction.	Throughout construction.	County of Tulare				
BIO-4	Equipment will be checked daily for leaks and will be well maintained to prevent lubricants and any other deleterious materials from entering the White River and the associated sensitive habitats.	Prior to start and during construction.	Throughout construction.	County of Tulare				

Mitigation Monitoring and Reporting Program

Mitigation Measure		When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
						Initials	Date	Remarks
BIO-5	Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.	Prior to start of construction.		County of Tulare				
BIO-6	A chemical spill kit must be kept onsite and available for use in the event of a spill.	Prior to start and during construction.		County of Tulare				
BIO-7	Following the completion of construction, all temporary effects to riverine, wetland, and riparian habitats would be recontoured and revegetated at a 1:1 ratio, to allow for the habitat to return to its previous function. Where possible, vegetation shall be trimmed rather than fully removed with the guidance of the Project biologist. All disturbed areas will be hydroseeded with a Project biologist approved native seed mix specific to each habitat type.	After completion of construction		County of Tulare				
BIO-8	Permanent effects to the White River channel, associated wetlands, and riparian habitats will be provided compensatory mitigation to result in no net loss of aquatic resources or habitat, at an agency-approved mitigation ratio via one of the follow compensatory mitigation options: • payment of an in-lieu fee to an agency-approved mitigation site, • compensatory off-site mitigation at an agency-approved mitigation site, • compensatory on-site mitigation, or • a combination of the above compensatory mitigation options.	After completion of construction		County of Tulare				
BIO-9	The County proposes to mitigate for native trees greater than or equal to 4-inches diameter at standard height (DSH) that have been removed by the Project at a minimum 2:1 ratio (per tree) on-site, off-site, or a combination of methods.	After completion of construction		County of Tulare				

Mitigation Monitoring and Reporting Program

Mitigation Measure		When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
						Initials	Date	Remarks
BIO-10	Prior to construction-related activities, a reconnaissance level survey will be conducted by the Project biologist to detect the Crotch bumble bee if it is present within the BSA. The survey will be conducted in the springtime, during peak blooming season, when the Crotch bumble bee is more likely to be encountered. High definition cameras will be utilized during survey efforts to capture unique physical characteristics of each bee species encountered. Photos will be submitted to online databases that employ bee experts, such as Bumble Bee Watch or Bee Spotters, as suggested in the Survey Protocols for the Rusty Patched Bumble Bee. If the Crotch bumble bee is presumed present within the BSA, additional coordination with CDFW will occur to determine appropriate measures to avoid impacts to the special-status bee species.	Prior to construction.		County of Tulare				
BIO-11	Prior to arrival at the Project site and prior to leaving the Project site, construction-related equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.	During construction.		County of Tulare				
BIO-12	If hydroseed and plant mixes are used during or post-construction, hydroseed mixes must consist of a biologist approved plant palate seed mix of native species sourced locally to the Project area.	During and after construction.		County of Tulare				
BIO-13	The construction contractor shall avoid removing any vegetation during the nesting bird season (February 1 through August 31). If vegetation must be removed within the nesting season, a pre-construction nesting bird survey must be conducted no more than 3 days prior to vegetation removal. The vegetation must be removed within 3 days from the nesting bird survey. Where practicable, a minimum 100-foot no-disturbance buffer will be established around any	Prior to start and during construction.		County of Tulare				

Mitigation Monitoring and Reporting Program

Mitigation Measure		When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
						Initials	Date	Remarks
	active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with the County and CDFW) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist and approved by the County and CDFW.							
BIO-14	All construction-related crew members will allow wildlife enough time to escape initial clearing and grubbing activities. Initial clearing and grubbing must be accomplished through the use of hand tools.	Prior to start and during construction.		County of Tulare				
BIO-15	The contractor must dispose of all food-related trash in closed containers and must remove it from the Project area each day during construction. Construction-related personnel must not feed or attract wildlife to the Project area.	During construction.		County of Tulare				
BIO-16	The contractor must not apply rodenticide or herbicide within the Project area during construction-related activities.	Prior to start and during construction.		County of Tulare				
CULTURAL RESOURCES								
CUL-1	If, in the course of Project construction or operation, any archaeological or historical resources are uncovered, discovered, or otherwise detected or observed, activities within fifty (50) feet of the find shall be ceased. A qualified archaeologist shall be contacted and advise the County of the site's significance. If the findings are deemed significant by the Tulare County Resources Management Agency, appropriate mitigation measures shall be required prior to any resumption of work in the affected area of the proposed Project. Where feasible, mitigation	During Construction.	Ongoing throughout construction.	County of Tulare	Determination by qualified archaeologist or paleontologist and consultation with County of Tulare			

Mitigation Monitoring and Reporting Program								
Mitigation Measure		**When Monitoring is to Occur**	**Frequency of Monitoring**	**Agency Responsible for Monitoring**	**Method to Verify Compliance**	**Verification of Compliance**		
						Initials	**Date**	**Remarks**
	achieving preservation in place will be implemented. Preservation in place may be accomplished by, but is not limited, to: planning construction to avoid archaeological sites or covering archaeological sites with a layer of chemically stable soil prior to building on the site. If significant resources are encountered, the feasibility of various methods of achieving preservation in place shall be considered, and an appropriate method of achieving preservation in place shall be selected and implemented, if feasible. If preservation in place is not feasible, other mitigation shall be implemented to minimize impacts to the site, such as data recovery efforts that will adequately recover scientifically consequential information from and about the site. Mitigation shall be consistent with CEQA Guidelines section 15126.4(b)(3). An archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology, hereafter "qualified archaeologist," should inspect the findings within 24 hours of discovery.							
CUL-2	If cultural resources are encountered during construction or land modification activities work shall stop and the County shall be notified at once to assess the nature, extent, and potential significance of any cultural resources. If such resources are determined to be significant, appropriate actions shall be determined. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions to be determined by a qualified archaeologist. For example, activities within 50 feet of the find shall be ceased. If it is determined that the Project could damage a significant cultural resource, mitigation should be implemented with a preference for preservation in	During Construction.	Ongoing throughout construction.	County of Tulare	Determination by qualified archaeologist or paleontologist and consultation with County of Tulare. Also, applicable Native American Tribe.			

Mitigation Monitoring and Reporting Program

Mitigation Measure		When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
						Initials	Date	Remarks
	place, consistent with the priorities set forth in CEQA Guidelines Section 15126.4(b)(3). If avoidance is not feasible, a qualified archaeologist should prepare and implement a detailed treatment plan in consultation with the County of Tulare and, for prehistoric resources, the ethnographically associated Native American tribe. If the resource is determined to be a tribal cultural resource, as defined by Public Resources Code 21074, the County of Tulare, in consultation with the ethnographically associated Native American tribe, should, if feasible, minimize significant adverse impacts by avoiding the resource or treating the resource with culturally appropriate dignity, which includes protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.							
CUL-3	Inadvertent Discovery of Human Remains. In the unlikely event of discovery or recognition of any human remains during construction-related activities, the provisions of CEQA Guidelines § 15064.5(e) shall be followed and such activities should cease within 50 feet of the find until the Tulare County Coroner has been contacted to determine that no investigation of the cause of death is required. If it is determined that the remains are Native American in origin, the Native American Heritage Commission (NAHC) will be contacted within 24 hours. The NAHC will then identify the person or persons it believes to be the most likely descendant (MLD) from the deceased Native American. The MLD would, in turn, make recommendations to the County of Tulare for the appropriate means of treating the human remains and any grave goods.	During Construction.	Ongoing throughout construction.	County of Tulare	Determination by qualified archaeologist or paleontologist and consultation with County of Tulare. Also, applicable Native American Tribe.			
GEOLOGY/SOILS								

Mitigation Monitoring and Reporting Program

Mitigation Measure		When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
						Initials	Date	Remarks
GEO-1	Construction and design of the proposed project shall be in compliance with current construction and seismic codes and standards, which would reduce potential seismic hazard risks to acceptable levels. Specific design and construction measures recommended in subsequent geotechnical studies to reduce geologic or seismic hazards shall be implemented. Subsequent geotechnical studies shall be completed prior to completion of final design for the proposed project.							
GEO-2	Contract specifications will include the following BMPs, where applicable, to reduce erosion during construction: • Implementation of the project will require approval of a site-specific SWPPP that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques; • Existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control; • Stabilizing materials will be applied to the soil surface to prevent the movement of dust from exposed soil surfaces on construction sites as a result of wind, traffic, and grading activities; • Roughening and terracing will be implemented to create unevenness on bare soil through the construction of furrows running across a slope, creation of stair steps, or by utilization of construction equipment to track the soil surface. Surface roughening or terracing reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing infiltration of water into the soil, and aiding in the establishment of vegetative cover from seed.							

Mitigation Monitoring and Reporting Program

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GEO-3	To conform to water quality requirements, the SWPPP must include the following: • Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must be a minimum of 100 feet from surface waters. Any necessary equipment washing must occur where the water cannot flow into surface waters. The project specifications will require the contractor to operate under an approved spill prevention and clean-up plan; • Construction equipment will not be operated in flowing water; • Construction work must be conducted according to site-specific construction plans that minimize the potential for sediment input to surface waters; • Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering surface waters; • Equipment used in and around surface waters must be in good working order and free of dripping or leaking contaminants; and, • Any concrete rubble, asphalt, or other debris from construction must be taken to an approved disposal site.							
HAZARDS & HAZARDOUS WASTE								
HAZ-1	Based on preliminary plans, temporary construction easements will be needed from the adjacent privately owned parcels throughout the length of the project. It is anticipated that right-of-way acquisitions are anticipated. These sites are adjacent to the project. Should final plans indicate that a portion of these parcels will be acquired for new right-of-way, a preliminary environmental							

Mitigation Monitoring and Reporting Program

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	screening, to determine presence or absence, (limited subsurface sampling and laboratory analysis) should be performed for potentially elevated levels of petroleum hydrocarbons and MTBE contamination within the limits of proposed construction, and/or right-of way acquisition. If site screening encounters elevated levels of petroleum hydrocarbons and/or MTBE, a limited Phase II Site Assessment should be performed. The Phase II Site Assessment should consist of subsurface sampling and laboratory analysis and be of sufficient quantity to define the extent and concentration of contamination within the areal extent and depths of planned construction activities adjacent to these sites. The Phase II Site Assessment should also provide both a Health and Safety Plan for worker safety and a Work Plan for handling and disposing contaminated soil during construction.							
HAZ-2	There is a potential that the proposed project could affect yellow thermoplastic pavement markings and other types or colors of street or municipal markings containing lead-based paint. If such markings are affected as a result of the project, such markings will be collected, tested, and/or disposed of in accordance with applicable regulations. Therefore, to avoid impacts from pavement striping during construction, it is recommended that testing and removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Specifications Section 84.9-Existing Markings for removing traffic stripes and pavement markings.							
HAZ-3	ADL is commonly associated with transportation construction due to emissions from vehicles powered by lead gasoline. It is recommended that testing be conducted to prior to excavation to determine the lead content present in soil along							

Mitigation Monitoring and Reporting Program

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	highways so that affected soil can be properly managed. Criteria for construction safety practices when handling lead can be found in California Code of Regulations (CCR), Title 8, Section 1532.1.							
HAZ-4	A single "Lead Compliance Plan" should be prepared for the project because of lead in the soils below the bridge in the study area and lead-based paint on the bridge (section 7- 1.02K(6)(j)(ii) of the SSPs and Section 7-1.02K(6)(j)(iii) of the SSPs). The SSPs should be included in the Contract requiring a Health & Safety Plan for workers in accordance with Cal OSHA Title 8, Section 1532.1. With respect to lead in the paint, the Special Provisions should address paint abatement prior to construction if necessary, worker protections with respect to handling of materials coated with lead-based paint, temporary storage, testing, and transportation to an appropriate disposal or recycling facility. The Resident Engineer should have the contractor provide written documentation that recycling or disposal facilities acknowledge the potential for lead on the material received.							
HAZ-5	Naturally Occurring Asbestos (NOA) occurs randomly throughout Northern California in rocks and soil because of natural geological processes. Natural weathering or construction activities can disturb soil or rock that contains NOA and release the fibers into the air potentially affecting pedestrians and workers in the area. Per the Naturally Occurring Asbestos Hazard map, the M109 White River Bridge Replacement location is less likely to contain NOA, however small bodies of rock or soil with moderate or higher likelihood of asbestos presence can exist. Criteria for construction safety practices regarding NOA can be found in CCR, Title 8, Section 5208.							

Mitigation Monitoring and Reporting Program

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HAZ-6	Any leaking transformers observed during the project should be considered a potential polychlorinated biphenyl (PCB) hazard. A detailed inspection of individual electrical transformers was not conducted for this ISA. However, should leaks from electrical transformers (that will either remain within the construction limits or will require removal and/or relocation) be encountered during construction-related activities, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.							
HAZ-7	It is recommended that an ACM is conducted by a Certified Asbestos Consultant (CAC) or by a Certified Site Surveillance Technician (CSST) working under a CAC. Abatement of ACM should be conducted by contractors certified to perform such work and in accordance with state and federal regulations. Waste management issues for ACM are regulated under California Code of Regulations Title 22 and the National Emission Standards for Hazardous Air Pollutants (NESHAP).							
HAZ-8	Any chemically treated wood must be treated as Treated Wood Waste (TWW) and disposed of as hazardous waste. For the TWW, the DTSC regulations §66261.9.5 provide alternative management standards (AMS) for TWW. Caltrans 2015 Special Standard Provision (SSP) for TWW,							

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	SSP 14-11.14, is based on DTSCs AMS regulations. This SSP directs the Contractor to follow the AMS including providing training to all personnel that may encounter TWW. This training must include, at a minimum, safe handling, sorting, and segregating, storage, labeling (including date), and proper disposal methods.							
HAZ-9	As is the case for any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during project construction-related activities. For any previously unknown hazardous waste/ material encountered during construction-related activities, the procedures outlined in Appendix B (Caltrans Unknown Hazard Procedures) shall be followed.							
HYDROLOGY & WATER QUALITY								
WQ-1	BMPs would be incorporated into Project design and Project management to minimize impacts on the environment including the release of pollutants (oils, fuels, etc.): • The area of construction and disturbance would be limited to as small an area as feasible to reduce erosion and sedimentation. • Measures would be implemented during land-disturbing activities to reduce erosion and sedimentation. These measures may include mulches, soil binders and erosion control blankets, silt fencing, fiber rolls, temporary berms, sediment desilting basins, sediment traps, and check dams. • Existing vegetation would be protected where feasible to reduce erosion and sedimentation. Vegetation would be preserved by installing temporary fencing, or other protection devices, around areas to be protected. • Exposed soils would be covered by loose bulk materials or other materials to reduce erosion and runoff during rainfall events.							

Mitigation Monitoring and Reporting Program

Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
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• Exposed soils would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction-related activities such as traffic and grading activities. The Project would comply with the Valley Air District's Regulation VIII (Fugitive PM10 Prohibitions). • All construction roadway areas would be properly and effectively protected to prevent excess erosion, sedimentation, and water pollution. • All vehicle and equipment maintenance procedures would be conducted off-site. In the event of an emergency, maintenance would occur away from White River. • All concrete curing activities would be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly. • All construction materials, vehicles, stockpiles, and staging areas, to the extent feasible, would be situated outside of the stream channel as feasible. All stockpiles, to the extent feasible, would be covered. • Energy dissipaters and erosion control pads would be provided at the bottom of slope drains. Other flow conveyance control mechanisms may include earth dikes, swales, or ditches. Stream bank stabilization measures would also be implemented. • All erosion control measures and storm water control measures would be properly and effectively maintained until final grading has occurred and permanent storm water measures are in place. • All disturbed areas would be restored to pre-construction contours and revegetated, either							

Mitigation Monitoring and Reporting Program

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	through hydroseeding or other means, with native or approved non-invasive exotic species.							
WQ-2	Any requirements for additional avoidance, minimization, and/or mitigation measures from all required regulatory agencies will be adhered to.							
WQ-3	The Project limits in proximity to White River, seasonal wetland, and riparian woodland will be marked as an Environmental Sensitive Area (ESA) or either be staked or fenced with high visibility material to ensure construction activities will not encroach further beyond established limits							
WQ-4	The construction contractor will adhere to the NPDES Permit pursuant to §402 of the CWA. This permit authorizes storm water and authorized non-storm water discharges from construction-related activities. As part of this Permit requirement, a SWPPP or Water Pollution Control Plan (if ground disturbance is less than 1 acre) will be prepared prior to construction consistent with the requirements of the RWQCB. This SWPPP/Water Pollution Control Plan will incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality.							
WQ-5	Storm water systems will be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological.							
NOSE								
NOI-1	To minimize the construction-generated noise, abatement measures from Standard Specification 14-8.02 "Noise Control" and SSP 14-8.02 must be followed: • Do not operate construction equipment or run the equipment engines from 7:00 p.m. to 7:00 a.m. or on Sundays, with the exception that you may operate equipment within the Project limits during these hours to:	During Construction.	Ongoing throughout construction.	County of Tulare	On-site Project Manager			

Mitigation Monitoring and Reporting Program								
Mitigation Measure		**When Monitoring is to Occur**	**Frequency of Monitoring**	**Agency Responsible for Monitoring**	**Method to Verify Compliance**	**Verification of Compliance**		
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	▪ Service traffic control facilities ▪ Service construction equipment • Equip an internal combustion engine with the manufacturer recommended muffler. • Do not operate an internal combustion engine on the job site without the appropriate muffler. • A variance from these requirements may be provided by request at the discretion of Tulare County.							
TRIBAL CULTURAL RESOURCES								
See Mitigation Measures CUL-1 through CUL-3								