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Los Padres National Forest Road Repair Project

(California Emergency Relief for Federally Owned Roads 5N,
6N, 7N, 11N and 20S05 Various Sites Project)

Mitigation Monitoring and Reporting Plan

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Los Padres National Forest Road Repair Project -- SCH No. 2014091071

Mitigation Monitoring and Reporting Plan – Acronyms and Abbreviations

APE: Area of Potential Effect (i.e., cultural resources survey area)

BA: Biological Assessment: LPNF *Biological Assessment for Federally Listed Wildlife Species for the 2011-2012 Emergency Relief for Federally Owned Roads Projects, Los Padres National Forest* (June, 2013)

BR: Biological Resource

CARLF: California red-legged frog

CDFW, CDFG: California Department of Fish and Wildlife

CEQA: California Environmental Quality Act

CFLHD: Central Federal Lands Highway Division (a division of FHWA)

CLL: California legless lizard

Corps: U.S. Army Corps of Engineers

CR: Cultural Resources

ERFO: Emergency Relief for Federally Owned Roads

FHWA: U.S. Department of Transportation – Federal Highway Administration

GEO: Geology and Soils

HAZ: Hazardous Materials

IS/MND: Initial Study/Mitigated Negative Declaration

LPNF: Los Padres National Forest

MMRP: Mitigation Monitoring and Reporting Plan

NEPA: National Environmental Policy Act

Programmatic BO: *Biological Opinion for Ongoing Activities Related to Transportation Facility Maintenance and Use, Los Padres National Forest, California (8-8-12-F-43)* (September 30, 2013)

Project BO: *USFWS Biological Opinion for Ongoing Activities Related to Transportation Facility Maintenance and Use, Los Padres National Forest, California (8-8-12-F-43)*, September 30, 2013; and *Biological Opinion for Emergency Relief for Federally Owned Roads Projects, Los Padres National Forest, California (8-8-13-F-48)* (May 29, 2014).

ROHWP: Relocation Out of Harms Way Plan (for removal of wildlife from project areas)

SBRD: Santa Barbara Ranger District

SSC: Species of Special Concern

Steelhead BA: *Biological Assessment for the Southern California Distinct Population Segment Steelhead for the 2011-2012 Emergency Relief for Federally Owned Roads Project, Ojai Ranger District, Los Padres National Forest*, May 2013.

SW-WIFL: Southwestern willow flycatcher

US, U.S.: United States of America, United States

USDA: US Department of Agriculture

USFS: U.S. Forest Service

USFWS: U.S. Fish and Wildlife Service

Los Padres National Forest Road Repair Project -- SCH No. 2014091071
Mitigation Monitoring and Reporting Plan

This Mitigation Monitoring and Reporting Plan (MMRP) for the Los Padres National Forest Road Repair Project (Project, State Clearinghouse No. 2014091071) is prepared in compliance with California Environmental Quality Act (CEQA). Specifically, this MMRP is intended to satisfy requirements found in section 15097 of the Guidelines for the Implementation of the CEQA (Cal. Code Regs., tit. 14, sec. 15000 et seq.; hereafter, Guidelines).

The Los Padres National Forest and FHWA are jointly responsible for the implementation of all of all mitigation measures described in this MMRP.

The Project was previously studied under a National Environmental Policy Act (NEPA) process conducted by the U.S. Department of Transportation – Federal Highway Administration’s Central Federal Lands Highway Division (FHWA, CFLHD). This NEPA process referred to the project as the California Emergency Relief for Federally Owned Roads 5N, 6N, 7N, 11N and 20S05 Various Sites Project.

Environmental Commitments prepared by FHWA comprise the primary content of this MMRP, presented as an Appendix to the original NEPA documents: *Appendix B Project Specific Environmental Commitments Summary Table, Project # ND ERFO¹ 6(1)*. These *Project Specific Environmental Commitments* are presented as Table 1 of this MMRP.

In addition to the Environmental Commitments found in Table 1, various standard practices and specifications for federal projects will be in effect for the Project. These are presented as Appendices to this MMRP, and include:

Appendix 1: Erosion and Sediment Control Best Management Practices

Appendix 2 Fire Management Plan

Appendix 3: Stream and Riparian Protection Best Management Practices

Additional mitigation measures were added to these commitments during preparation of the CEQA Initial Study/Mitigated Negative Declaration (IS/MND) and subsequent consultation with the California Department of Fish and Wildlife (CDFW) as discussed below.

All of the following mitigation measures are quoted from the IS/MND except for BR-4 (***ERFO Site- and Species-Specific Mitigation Measures***) ***which has been replaced with the wording below after a Public Hearing was held. Some of the mitigation measures have been altered with minor grammatical editing for clarity in this document. A number of the mitigation measures are required by other federal permits as indicated or are measures provided by CDFW acting as trustee agency.***

Mitigation Measure Biological Resources (BR-1): California Condors.

Timing: Immediately before and during Construction.

No work activities should take place within 0.5 mile of a California condor roost site. If condors are observed or if GPS data show condor roosting in the vicinity of any project site at the time

¹ Emergency Relief for Federally Owned Roads

that work is scheduled to take place, a 0.5 mile buffer shall be established around the roost site and no construction activities will be allowed within the buffer until condors abandon the roost site. If a condor is observed within 0.5 miles of any work site during scheduled work hours, the United States Forest Service (USFS) shall be notified immediately, and the USFS will contact the U.S. Fish and Wildlife Service (USFWS) immediately to determine what further measures are needed to avoid impacts to condors. In addition, work sites shall be cleaned of trash on a daily basis and no objects should be left where condors could potentially become entangled (*USFWS Biological Opinion for Ongoing Activities Related to Transportation Facility Maintenance and Use, Los Padres National Forest, California (8-8-12-F-43)*, September 30, 2013; and *Biological Opinion for Emergency Relief for Federally Owned Roads Projects, Los Padres National Forest, California (8-8-13-F-48)* (May 29, 2014) (Project BO, pg. 2).

Mitigation Measure BR-2: Observation of Listed Species within Project Area.

Timing: Immediately before and during construction.

Upon initiation of work, if any listed species are observed in the project area, the Corps should be notified immediately and work suspended until the Corps, USFS and USFWS complete the appropriate level of consultation (Project BO, pg. 2).

Mitigation Measure BR-3: Pets.

Timing: During construction.

Pets of project personnel and employees shall not be allowed on site where they may come into contact with any federally or state listed species.

Mitigation Measure BR-4: ERFO Site- and Species-Specific Mitigation Measures

Timing: Before and during construction.

Mitigation measures for migratory birds including least Bell's vireo and southwestern willow flycatcher (SW-WIFL) and for southern steelhead trout, arroyo toad and California Red-legged Frog (CRALF):_ For all sites discussed below where site specific mitigation measures for migratory birds, including least Bell's vireo and southwestern willow flycatcher are required, the following migratory bird mitigation measures (MBMMs) shall be implemented:

LPNF shall ensure that suitable nesting sites for migratory nongame native bird species protected under the Federal Migratory Bird Treaty Act and/or trees with unoccupied raptor nests (large stick nests or cavities) may only be removed prior to February 1, or following the nesting season.

A survey to identify active raptor and other migratory nongame bird nests may be conducted by a qualified biologist at least two weeks before the start of construction at project sites from February 1st through August 31st. Any active non-raptor nests identified within the project area or within 300 feet of the project area may be marked with a 300-foot buffer, and the buffer area may need to be avoided by construction activities until a qualified biologist determines that the chicks have fledged. Active raptor nests within the project area or within 500 feet of the project area may be marked with a 500-foot buffer and the buffer avoided until a qualified biologist determines that the chicks have fledged. If the 300-foot buffer for non-raptor nests or 500-foot

buffer for raptor nests cannot be avoided during construction of the Project, the project sponsor may retain a qualified biologist to monitor the nests on a daily basis during construction to ensure that the nests do not fail as the result of noise generated by the construction. The biological monitor may be authorized to halt construction if the construction activities cause negative effects, such as the adults abandoning the nest or chicks falling from the nest.

- Beginning thirty days prior to the disturbance of suitable nesting habitat, the project sponsor may arrange for weekly bird surveys conducted by a qualified biologist with experience in conducting breeding bird surveys to detect protected native birds occurring in the habitat that is to be removed and any other such habitat within 300 feet of the construction work area (within 500 feet for raptors) as access to adjacent areas allows. The last survey may be conducted no more than 3 days prior to the initiation of clearance/construction work.

If an active raptor nest is found within 500 feet of the project or nesting habitat for a protected native bird is found within 300 feet of the project a determination may be made by a qualified biologist in consultation with CDFG² whether or not Project construction work will impact the active nest or disrupt reproductive behavior.

- If it is determined that construction will not impact an active nest or disrupt breeding behavior, construction will proceed without any restriction or mitigation measure. If it is determined that construction will impact an active raptor nest or disrupt reproductive behavior then avoidance is the only mitigation available. Construction may be delayed within 300 feet of such a nest (within 500 feet for raptor nests), until August 31 or as determined by CDFG, until the adults and/or young of the year are no longer reliant on the nest site for survival and when there is no evidence of a second attempt at nesting as determined by a qualified biologist. Limits of construction to avoid a nest may be established in the field with flagging and stakes or construction fencing marking the protected area 300 feet (or 500 feet) from the nest. Construction personnel may be instructed on the sensitivity of the area.

Documentation of compliance with applicable state and federal laws pertaining to the protection of native birds shall be recorded and made available to the State Water Board and USFWS upon request.

Squaw Flat Road Site 6N16 – 1.7 milepost

- To minimize potential effects to the least Bell's vireo and other migratory birds, implement Mitigation Measure 4a and all conditions of the Project BO (Project BO, pg. 2). To protect least Bell's vireo and southwestern willow flycatcher, the terms and conditions in the Biological Opinion for Ongoing Activities Related to Transportation Facility Maintenance and Use, Los Padres National Forest, California (8-8-12-F-43) (September 30, 2013)(Programmatic BO)

Squaw Flat Road Site 6N16 – 2.6 milepost

- ERFO work should be conducted when there is no flowing water in the drainages to prevent sedimentation or other water quality effects to downstream areas (*Biological Assessment for the Southern California Distinct Population Segment*)

² This adopted measure is quoted from existing standard CDFW measures which retain references to "Department of Fish and Game," and are still in common use.

Steelhead for the 2011-2012 Emergency Relief for Federally Owned Roads Project, Ojai Ranger District, Los Padres National Forest, May 2013; Steelhead BA).

Colson Canyon Site 11N04.4 – 3.1 milepost

- To minimize potential effects to the least Bell's vireo and other migratory birds, implement Mitigation Measure 4a and all conditions of the Project BO
- Work must be completed between September 15 and November 15 to minimize potential effects to and CARLF, unless a biologist determines the creek at the project site is dry and there will be no change to riparian vegetation (Project BO, pg. 2).
- To protect least Bell's vireo and southwestern willow flycatcher, the terms and conditions in the Programmatic BO will be implemented when working near stream channels (Project BO, pg. 2). The terms and conditions are identified in Appendix E.

Big Caliente Road Site 5N16 – 1.2 milepost

- In advance of work activities coordinate with a qualified biologist to implement the Project BO terms and conditions as listed in Appendix D (Project BO, pg. 18-19).
- A biologist will survey sites for the presence of arroyo toads prior to the start of construction activities. Work crews will cease work immediately if any arroyo toads are detected within the project area, and the work will remain suspended until the USFS and USFWS complete the appropriate level of consultation (Project BO, pg. 2).
- Implement the Programmatic BO terms and conditions for arroyo toad, CARLF, and least Bell's vireo as listed in Appendix E when working near stream channels (Project BO, pp 2, 3, 6).
- Conduct project activities when no water is present in Agua Caliente Creek (Project BO, pg. 6).
- Work must be completed May 1 to October 31 (outside the rainy season) to protect CARLF (Project BO, pg. 6).
- To minimize potential effects to the least Bell's vireo and other migratory birds, implement Mitigation Measure 4a and all conditions of the Project BO
- Coordinate with District Archaeologist (Steve Galbraith – Santa Barbara Ranger District (SBRD)) prior to implementing repair work. Nearby historic properties shall be flagged by Archaeologist prior to Project implementation and those areas shall be avoided throughout the duration of the Project.

Rose Valley Lake Road Site 6N31F – 0.2 milepost

- ERFO work should be conducted when there is no flowing water in the drainages to prevent sedimentation or other water quality effects to downstream areas (Steelhead BA).

These measures will provide additional protection for migratory birds. Proposed changes to the initial study to effect these changes are presented in the next section of this notice.

Mitigation Measure BR-6: Protection Measures for Blainville's Horned Lizard (Phrynosoma blainvillii), Two-Striped Garter Snake (Thamnophis hammondi) and Southwestern Pond Turtle (Actinemys marmorata pallida).

Timing: Before and during construction.

During construction, a qualified environmental monitor shall be present to monitor for California Species of Special Concern (SSC) encountered in the path of Project-related activities. The monitor should make every effort to relocate SSC out-of-harm's way to the extent feasible, using the Relocation Out of Harms Way Plan (ROHWP). Exclusionary devices should be erected to prevent the migration into or the return of SSC into the work areas if determined appropriate and feasible by the environmental monitor. Such exclusionary devices should be checked by the biologist, or designee of the biologist, on a daily basis to check/ensure continued exclusionary device effectiveness.

Mitigation Measure BR-7: Protection Measures for California Legless Lizard (Anniella Pulchra)

Timing: Before and during construction.

California legless lizard (CLL) is found beneath leaf litter and soil and would not be readily observable in its habitat during construction. The methodology below shall be employed to detect this species in the proposed work areas pre-construction:

- Surveys should be conducted on a warm day (70-80 degrees Fahrenheit), approximately mid-morning, and no longer than two weeks prior to construction soil disturbance (grubbing and grading).
- Relative soil moisture should be approximately 65-80 percent with soil temperatures being 60-70 degrees Fahrenheit.
- Two-person teams should work with one person using a hand rake to gently rake the loose litter and soil substrate down to firmer substrate. Raking should not exceed this depth. The other person should be simultaneously spotting for CLL. The spotter should assist the person raking in the event that raking occurs in close proximity to native plants.
- Surveys should use a "three-pass" method to locate as many CLL as possible. The highest quality CLL habitat should be surveyed first.

First Pass

Vegetation within the limits of disturbance should be cut by hand to facilitate raking and searching in the soil under the vegetation. Any CLL located should be placed in a lidded, vented box containing clean sand. Areas of moist and dry sand should be present in the box. Boxes should be kept out of direct sunlight and protected from temperatures over 72°F. The sand should be kept at temperatures under 66°F. Information on each lizard captured should be recorded and should consist of date of capture, location found, length, color, age, and tail condition. All lizards captured should be relocated to suitable off-site habitat the same day as capture.

Second Pass

If CLL are found on the first pass, an overnight period of no disturbance should occur before the second pass. Procedures for the second pass should be identical to the first pass.

Third Pass

If CLL are found on the second pass, a third pass should be conducted after an overnight period of no disturbance. Procedures for the third pass should be identical to the first pass.

Mitigation Measure BR-8: Protection Measures for Blunt-nosed Leopard (*Gambelia sila*)

Timing: Before and during construction.

As a fully-protected animal under the California Fish and Game Code section 5050, detection of species presence on a project site is crucial for Blunt-Nosed Leopard Lizard (BNLL). Mitigation Measure BR-7 provides a protocol designed to optimize the likelihood of detecting the presence of blunt-nosed leopard lizards should they occur on a project site. This mitigation measure should be implemented in consultation with USFWS to ensure that federal species protocols are also followed.

In particular, this measure shall be implemented at the Reyes Creek Road Site (7N11 - 0.2 milepost).

Disturbing activities should not proceed until appropriate surveys are conducted to determine if the species is present on the site. Surveys conducted according to the following protocol by qualified researchers provide a reasonable, although not conclusive, indication of BNLL presence at a particular site and yield critical information needed to prevent mortality and minimize impacts to the species. Researchers conducting the surveys are expected to understand the basic biological requirements of the species and have the ability to recognize potential BNLL habitat. This protocol satisfies the CDFW requirements when it is determined that formal BNLL surveys are needed. [Note: This protocol is appropriate for pre-project BNLL surveys, however, population monitoring over time on a site is best conducted using a permanent survey grid, such as described in Tollestrup (1976).]

BNLL Methods: All BNLL surveys shall be conducted in accordance with the *California Department Of Fish And Game*³ *Approved Survey Methodology For The Blunt-Nosed Leopard Lizard* (May 2004) by surveyors who meet all CDFW qualifications.

A minimum of two researchers, walking in parallel on adjacent transects, should conduct a BNLL survey. Optimum BNLL activity periods occur when air temperature is between 25-35 degrees Centigrade (77-95 degrees Fahrenheit) (Tollestrup 1976; USFWS 1985, 1998). Surveys must be conducted when the air temperature falls within the optimal range. Surveys may begin after sunrise as soon as the minimum air temperature criterion is met, and must end by 1400 hours or when the maximum temperature is reached, whichever occurs first (Tollestrup 1976). Time of day and air temperature should be recorded at the start and end of each survey. Air temperature should be periodically checked to ensure that the maximum has not been exceeded. Air temperature should be measured at 1-2 cm above the ground over a surface most representative of the area being surveyed. The researcher must shade the thermometer from direct sunlight while taking the reading. Other factors that affect BNLL activity such as soil temperature (measured at 1 cm below soil surface with a shaded thermometer) and weather conditions must be recorded at the start and end of each survey. Surveys should not be conducted on overcast days (cloud cover > 90%) or when sustained wind velocity exceeds 10

³ Although now known as the Department of Fish and Wildlife, this document references the Department of Fish and Game.

mph (force > 3 on Beaufort wind scale) (Montanucci 1965; Tollestrup 1976; J. Vance, pers. comm.).

Surveys must be conducted on foot, and researchers must survey all areas with potential BNLL habitat. BNLL are often difficult to detect, particularly in areas where shrubs are fairly numerous (>30% cover) and/or the herbaceous vegetation is tall (>30 cm). In such conditions, 10 meter wide transects should be walked at a slow pace. In areas with few shrubs and shorter herbaceous vegetation (<15 cm), transects as wide as 30 meters are acceptable. When feasible, transects should be walked in a north-south orientation to minimize glare from the sun. The surveyor should stop periodically and scan the transect for BNLL using close-focusing binoculars (minimum 7X35 magnification). In addition to recording the location of all BNLL observed (must provide UTM coordinates), the presence of habitat features important for BNLL (washes, playas, relative abundance of small mammal burrows) should also be recorded for each transect. Streambeds, washes, roads, etc., should be walked in addition to transect lines since BNLL are often seen in these areas.

Timing and Length of Survey: Survey intensity should be commensurate with the anticipated level of disturbance to the BNLL habitat. The primary concern for BNLL when disturbance occurs during maintenance activities is direct mortality from equipment or personnel. Removal of intact BNLL habitat has a much greater potential for "take" due to direct impact on animals aboveground as well as any hibernating animals or eggs underground. A longer survey effort including both spring adult surveys and fall hatchling surveys is therefore required for activities that cause impacts to undisturbed BNLL habitat. The more intensive survey effort increases the chances of observing the species, even if the population is small. Once a BNLL has been observed, surveys may cease and consultation with the Department must begin regarding avoidance measures. If BNLL are observed incidentally while conducting surveys for other species, specific surveys for BNLL are not required. Surveys will be accepted for one year from the date of completion. Disturbances for Maintenance Activities: Examples of maintenance activities include grading existing roads, grass mowing on roadsides, and maintaining existing structures. BNLL are active and above ground from April through September, but optimum activity periods for adults occur between April 15 and July 15 (Montanucci 1965; Tollestrup 1979; USFWS 1985, 1998). BNLL surveys should be conducted for a total of 8 days over the course of the 90-day time span. A minimum of 3 survey days should be conducted consecutively, with a maximum of 6 days completed within any 30-day time period. Fall hatchling surveys are not required for activities in this category.

Disturbances Leading to Habitat Removal: Examples of disturbances that impact intact habitat include establishment of new roads or structures, housing subdivisions, and changes in historic land use. BNLL surveys should be conducted for 12 days over the course of the 90-day adult optimal survey period (April 15 to July 15), with a maximum of 4 survey days per week and 8 days within any 30-day time period. At least one survey session should be conducted for 4 consecutive days, weather permitting. BNLL hatchlings and sub-adults are most commonly observed from August 1 to September 15, along with a few adults that are still active above ground (Montanucci 1965; Tollestrup 1979; USFWS 1985, 1998). In addition to the 12 days of adult BNLL surveys required for activities in this category, 5 more survey days are required during the hatchling optimal survey period for a total of 17 survey days overall.

Qualifications of Researchers: An acceptable BNLL survey crew should consist of no more than 3 Level I researchers for every Level II researcher, as defined below. This restriction should reduce the number of incorrect/missed identifications. The names and affiliations of all researchers must be recorded for each survey day.

- *Level I: Researcher has demonstrated the ability to distinguish BNLL from other common lizard species that may inhabit the area;*
- *Level II: Researcher has demonstrated the ability to distinguish BNLL from other common lizard species that may inhabit the area and has participated in at least 50 survey days for BNLL (or 25 survey days and a BNLL identification course recognized by/acceptable to the Department of Fish and Game⁴). Researcher has made at least one confirmed* field sighting of a BNLL.*

Qualifications for Level I and II have been established by follows⁵:

According to the survey protocol, a minimum of one confirmed field sighting must be documented for each Level II researcher and be available to the Department upon request. As with all BNLL sightings, it should also be submitted to the California Natural Diversity Database. Information to be included in documentation of BNLL sighting: Name of researcher, date of survey, location of survey, names of accompanying researchers who can confirm the sighting, and details of sighting (distance, BNLL activity, etc.).

Reporting: All BNLL observations should be reported to the California Natural Diversity Database within 30 days. A sample form is attached. Additional forms can be obtained at <http://www.dfg.ca.gov/whdab/html/animals.html>.

Note that special requirements for BNLL surveys in the CDFW Central Coast Region (San Luis Obispo County) do not apply, since the one site in the Project for which BNLL habitat is reported does not occur in San Luis Obispo County.

Mitigation Measure BR-9: Implement Riparian Protection BMPs:

Timing: During construction.

The Project will comply with section 157 of the *Standard Specifications For Construction Of Roads And Bridges On Federal Highway Projects FP-03 U.S. Customary Units U.S. Department Federal of Transportation, Federal Highway Administration, Federal Lands Highway* during construction (available at: <http://flh.fhwa.dot.gov/resources/pse/specs/fp-03/fp-03usc.pdf>).

Key elements of these guidelines include the following stipulations:

FP-03; Section 107.02: Do not disturb the area beyond the construction limits. Replace trees, shrubs, or vegetated areas damaged by construction operations. Any damaged limbs of existing trees should be removed by an arborist in accordance with USFS standards.

FP-03; Section 107.10: Do not operate mechanized equipment or discharge or otherwise place any material within the wetted perimeter of any waters of the state. Any culvert placed within a stream where aquatic species may occur, should be designed, constructed and maintained

⁴ Although now known as the Department of Fish and Wildlife, the measures referred to here are quoted from the DFW's BNLL survey methods, which retain the original references to the Department of Fish and Game.

⁵ See footnote 1 of the May, 2004 CDFW Blunt Nose Leopard Lizard Survey Protocol.

such that it does not constitute a barrier to upstream or downstream movement of aquatic life, or cause an avoidance reaction by species that impedes their upstream or downstream movement.

FP-03; Section 107.10: Separate work areas, including material sources, by the use of a dike or other suitable barrier that prevents sediment, petroleum products, chemicals, or other liquid or solid material from entering the waters of the state. Use care in constructing and removing the barriers to avoid any discharge of material into, or the siltation of, the water. Remove and properly dispose of the sediment or other material collected by the barrier.

No concrete or any cement product may be poured if measurable rain is forecasted within 15 days. If any concrete is poured after November 15, a quick cure ingredient should be added to the concrete mix to ensure a faster set or drying time. Cement and concrete should not be poured within 150 feet of a stream during the rainy season. Cement should not be poured in or near a flowing stream, to reduce the potential for significant adverse impacts to the stream, water, or biota without prior approval. To prevent the release of materials that may be toxic to fish and other aquatic species, the poured concrete structure(s) should be isolated from water and allowed to dry/cure for a minimum of 30 days. As an alternative, the USFS should monitor the pH of any water that has come into contact with the poured concrete. If this water has a pH of 9.0 or greater, the water should be pumped to tanker truck or to a lined off-channel basin and allowed to evaporate or be transported to an appropriate facility for disposal. During the pH monitoring period, all water that has come in contact with poured concrete should be isolated and not allowed to enter the water or otherwise come in contact with fish and other aquatic resources. The water should be retested until pH values become less than 9.0. Once this has been determined, the area no longer needs to be isolated. A non-toxic substance that can buffer the pH should be made available on site to use if any contamination to water occurs.

Vehicles should not be driven or equipment operated in water covered portions of a stream, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed.

No equipment should be operated within the dripline of oaks. Protective fencing should be placed around the dripline of oaks to prevent compaction of the root zone.

FP-03, Section 107.10: Repair leaks on equipment immediately. Do not use equipment that is leaking. Keep a supply of acceptable absorbent materials at the job site in the event of spills. Acceptable absorbent materials are those that are manufactured specifically for the containment and clean-up of hazardous materials. Staging/storage areas for equipment and materials should be located outside of the stream. Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to the stream should be positioned over drip pans. If welders are used, fire suppression equipment should be on site at all times the welder is being used.

The clean-up of all spills should begin immediately. If vacuum trucks or pumps are used to clean up any contamination in water, or for any other use, the vacuum hose should be placed in a 3 to 4 square foot area, protected on all side by exclusionary fencing to lower velocities and to prevent the uptake of any aquatic life.

Mitigation Measure BR-10: Install concrete structures in streams during dry conditions.
Timing: During construction.

Installation of new poured-in-place concrete structures will occur when creek beds are dry and no significant seepage of concrete solids or fluids to subsurface waters (i.e., near surface

ground waters) is expected. Installation will not take place within seven days of when rainfall or surface flows are expected or likely to occur.

Mitigation Measure Cultural Resources (CR-1): Unrecorded Cultural Resources.

Timing: During construction.

Should any previously unrecorded cultural resources be encountered during implementation of this project, all work shall immediately cease in that area and the District Archeologist of the ranger district in which the work is occurring shall be notified immediately. Work may resume after approval by the District Archeologist; provided any recommended Standard Protection Measures are implemented as described in the *Programmatic Agreement Among the U.S.D.A.⁶ Forest Service, Pacific Southwest Region (Region 5), California State Historic Preservation Officer, Nevada State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Processes for Compliance with Section 106 of the National Historic Preservation Act for Management of Historic Properties by the National Forests Of The Pacific Southwest Region (Regional PA).*

Should any cultural resources become damaged in unanticipated ways by activities proposed in this project; the steps described in the Regional PA for inadvertent effects will be followed.

Mitigation Measure CR-2: Project Boundaries.

Timing: During construction.

Should the Project boundaries or activities vary from the current analyzed proposal, compliance with section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. § 470f) for this Project will be incomplete until additional cultural resource review is completed.

The Forest Archaeologist will be kept informed of the status of various stages of the project, so that subsequent field work can proceed in a timely fashion. Monitoring of the area may occur after the Project has been completed.

Mitigation Measure CR-3: ERFO Site Specific Mitigation Measures.

Timing: Before and during construction.

Big Caliente Road Site 5N 16 - 1.2 milepost: Coordinate with District Archaeologist (Steve Galbraith - SBRD) prior to implementing repair work. Nearby historic properties shall be flagged by Archaeologist prior to Project implementation and those areas shall be avoided throughout the duration of the Project.

Figueroa Mountain Road 7N07 - 1.7 milepost: Coordinate with District Archaeologist (Bob Strickland – Santa Lucia Ranger District (SLRD)) prior to implementing repair work. Nearby historic properties shall be flagged by Archaeologist prior to Project implementation and those areas shall be avoided throughout the duration of the Project.

⁶ United States Department of Agriculture.

Mitigation Measure CR-4: Implement measures to avoid disturbance of human remains.

In the event that human remains are encountered during the archaeological fieldwork stipulated in the Historic Properties Treatment Plan, fieldwork will proceed according to the following protocol:

- The unit bearing the remains will be secured and the discovery will remain unexcavated until consultation occurs with the FHWA, the State Historic Preservation Officer, LPNF, and consulting Tribes.
- Human remains and associated funerary items will be removed according to the provisions agreed upon during consultation. Because of logistical issues, any excavated remains will be temporarily housed with the LPNF until outside analyses occur, if any, and during the period following analysis and before reburial.
- Consultation will determine the nature and extent of any analysis to be performed on human remains prior to internment under the Native American Graves Protection and Repatriation Act. Minimum analysis includes the determination of age and gender. Additional analyses may include various methods that determine general health conditions at the time of death.

As acknowledged in the discussion of the Environmental Setting for Cultural Resources in the IS/MND, the Project shall comply with section 106 of the National Historic Preservation Act of 1966, as amended in accordance with provisions of the Regional PA.

As described in section 7.10 of the Regional PA, should any previously unrecorded cultural resources be encountered during implementation of this project, all work should immediately cease in that area and the District Archeologist be notified immediately. Work may resume after approval by the District Archeologist; provided any recommended Standard Protection Measures are implemented. Should any cultural resources become damaged in unanticipated ways by activities proposed in this Project; the steps described in the Regional PA for inadvertent effects will be followed.

Should previously undiscovered human remains be discovered during project activities, all measures described in sections 7.9 and 7.10 of the programmatic agreement shall be implemented.

Should the project boundaries or activities be expanded beyond the current Area of Potential Effect (APE), section 106 compliance for this Project will be incomplete until additional cultural resource review is completed.

The District Archaeologist will be kept informed of the status of various stages of the Project, so that subsequent field work can proceed in a timely fashion. Monitoring of the area may occur after the Project has been completed. This work will be documented in amendments to this report, as appropriate.

Geology and Soils (GEO-1): Comply with Federal BMPs for soil stabilization.

Timing: During construction.

All Project activities will comply with section 107 of the *Standard Specifications For Construction Of Roads And Bridges On Federal Highway Projects FP-03 U.S. Customary Units, U.S. Department Transportation, Federal Highway Administration, Federal Lands Highway* (<http://flh.fhwa.dot.gov/resources/pse/specs/fo-03/fp-03usc.pdf>) during construction.

Hazardous Materials (MM-HAZ 1): Comply with Forest Service Manual 6309.32 and 6309.11

Timing: During construction.

All USFS fire regulations and practices as described in Forest Service Manual 6309.32 and 6309.11 will be enforced for the entire Project. These measures are described in detail in the Project IS/MND, Appendix C: Fire Management.