



**California Department of Fish and Wildlife
Northern Region
601 LOCUST STREET
REDDING, CA, 96001**

California Endangered Species Act
Incidental Take Permit No. 2081-2020-027-01

UNION PACIFIC RAILROAD BRIDGE REPLACEMENT

Authority:

This California Endangered Species Act (CESA) incidental take permit (ITP) is issued by the California Department of Fish and Wildlife (CDFW) pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. CESA prohibits the take¹ of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species.² CDFW may authorize the take of any such species by permit if the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c) are met. (See Cal. Code Regs., tit. 14, § 783.4).

Permittee:	Union Pacific Railroad
Principal Officer:	Steve Cheney, Director of Design and Environmental
Contact Person:	Doug Anderson, (303) 471-3484
Mailing Address:	1400 Douglas Street, Stop 0910 Omaha, NE 68179

Effective Date and Expiration Date of this ITP:

This ITP shall be executed in duplicate original form and shall become effective once a duplicate original is acknowledged by signature of the Permittee on the last page of this ITP and returned to CDFW's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. Unless renewed by CDFW, this ITP's authorization to take the Covered Species shall expire on October 15, 2022.

Notwithstanding the expiration date on the take authorization provided by this ITP, Permittee's obligations pursuant to this ITP do not end until CDFW accepts as complete the Permittee's Final Mitigation Report required by Condition of Approval 5.6 of this ITP.

¹Pursuant to Fish and Game Code section 86, "'take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (See also *Environmental Protection Information Center v. California Department of Forestry and Fire Protection* (2008) 44 Cal.4th 459, 507 [for purposes of incidental take permitting under Fish and Game Code section 2081, subdivision (b), "'take' ... means to catch, capture or kill".])

²The definition of an endangered, threatened, and candidate species for purposes of CESA are found in Fish and Game Code sections 2062, 2067, and 2068, respectively.

Project Location:

The Union Pacific Railroad (UPRR) Bridge Replacement Project (Project) is located on Deer Creek within the UPRR right-of-way (ROW), Tehama County, at approximately 39.941335° North, -122.059300° West (See Figure 1). The Project site spans Deer Creek approximately 2.5 miles upstream of the confluence with the Sacramento River, and is located west of California State Route 99 and north of the community of Vina.

Project Description:

The Project includes the replacement of the existing 3-span, 180-foot-long deck plate girder open deck bridge. The existing bridge, originally constructed in 1897, has outlived its use and must be replaced for continued and improved passenger and freight rail service in the region. There is evidence that the flow and migration of Deer Creek has caused significant scour on the south abutment that has required rock armoring and repair. The steel cylinder piers used for this type of bridge elsewhere on the UPRR Valley Subdivision have exhibited settlement. For these reasons, bridge replacement is required for continued service on the Valley Subdivision.

Project construction is planned to start in April 2021 with upland activities. UPRR plans to replace the entire bridge with three 69-foot beam span ballast deck-bridge girders, one 45-foot pre-stressed concrete box (PCB) girder on the north side, and timber ties. The new bridge will total 252-feet in length and have an opening area of 3,429-square feet. Upland Project activities include removal and replacement of existing northern and southern abutments, construction of new backwalls, and other activities. The southern abutment will be moved approximately 35 feet south, and the northern abutment will be moved approximately 25 feet north. The banks on either side of the new abutments will be regarded to a 2:1 slope and Class 2 riprap will be placed from the abutment to the edge of, but not internal to, the ordinary high water mark (OHWM) for bank stabilization.

In-water Project activities include installation of two temporary bridges for cranes and drill rigs, one on either side of the existing bridge, removal of all existing bridge structures, including excavation of existing piers below the OHWM, installation of new bridge bents, and other activities. Project in-water construction activities are proposed from June 15 to October 15.

Temporary bridges will consist of 45-foot spans and will be supported by piles driven into the streambed. The piles will be driven in dry areas between April 15 and June 15, and after June 15 in water. All temporary in-water bridge structures will be removed when construction is complete (prior to October 15). All construction will occur from the temporary bridges; therefore, no heavy machinery will enter the water.

Each new bent will be supported by two 60-inch diameter drilled shafts consisting of cast-in-place reinforced concrete. At the beginning of the in-water work window (June 15), UPRR

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expects that two of the proposed drilled shafts (one bent) will be within the flow of Deer Creek. Casings for the new drilled shafts will be vibrated into the streambed. Then shafts will be drilled using a drill rig and filled with cast-in-place reinforced concrete. During the drilling process, displaced water and sediment will be collected in a container and taken off-site for disposal.

Depending on stream flow level, dewatering may be required for the removal of the southern abutment and one existing bridge pier below the OHWM (if submerged). If needed, dewatering will be accomplished by constructing a cofferdam consisting of sand-filled super sacks. These cofferdams constitute the only proposed temporary stream fill and will be removed once the southern abutment and pier have been removed and filled. The pier will be excavated to approximately 3 feet below the ground level. The pit left by the pier removal will be filled to one foot below ground-level with structural gravel fill, and the final one foot will be filled with gravel approximately the same size as the existing main channel substrate.

Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

Name	CESA Status
1. Central Valley Spring-Run Chinook Salmon (<i>Oncorhynchus tshawytscha</i>)	Threatened ³

This species and only this species is the “Covered Species” for the purposes of this ITP.

Impacts of the Taking on Covered Species:

Project activities and their resulting impacts are expected to result in the incidental take of individuals of the Covered Species. The activities described above expected to result in incidental take of individuals of the Covered Species include pile driving and other construction activities, as well as dewatering and resulting fish salvage activities (Covered Activities).

Incidental take of individuals of the Covered Species in the form of mortality (“kill”) may occur as a result of Covered Activities such as Activities such as striking, entrapment, and crushing during the removal of material from the channel, construction of the cofferdam, placement of fill material and riprap, installation of anchors for a turbidity curtain, installation of temporary work bridges, removal of all existing bridge structures including excavation of piers and abutment removal, and installation of new permanent bridge piers. Incidental take of individuals of the Covered Species may also occur from the Covered Activities in the form of pursue, catch, capture, or attempt to do so of the Covered Species from fish salvage

³See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(2)(C).

activities. The areas where authorized take of the Covered Species is expected to occur include: all in-water Project sites described under "Project Location" (see also Fig. 2), as well as biologist-directed fish salvage locations.

The Project is expected to cause the permanent loss of 0.002 acres of habitat for the Covered Species, and temporary loss of 0.01 acres of habitat for the Covered Species. Impacts of the authorized taking also include adverse impacts to the Covered Species related to temporal losses, increased habitat fragmentation and edge effects, and the Project's incremental contribution to cumulative impacts (indirect impacts). These impacts include: stress resulting from noise and vibrations from heavy equipment work as well as from fish salvage operations, and long-term effects due to increased pollution, displacement from preferred habitat, increased competition for food and space, and increased vulnerability to predation.

Incidental Take Authorization of Covered Species:

This ITP authorizes incidental take of the Covered Species and only the Covered Species. With respect to incidental take of the Covered Species, CDFW authorizes the Permittee, its employees, contractors, and agents to take Covered Species incidentally in carrying out the Covered Activities, subject to the limitations described in this section and the Conditions of Approval identified below. This ITP does not authorize take of Covered Species from activities outside the scope of the Covered Activities, take of Covered Species outside of the Project Area, take of Covered Species resulting from violation of this ITP, or intentional take of Covered Species except for capture and relocation of Covered Species as authorized by this ITP.

Conditions of Approval:

Unless specified otherwise, the following measures apply to all Covered Activities within the Project Area, including areas used for vehicular ingress and egress, staging and parking, and noise and vibration generating activities that may/will cause take. CDFW's issuance of this ITP and Permittee's authorization to take the Covered Species are subject to Permittee's compliance with and implementation of the following Conditions of Approval:

- 1. Legal Compliance:** Permittee shall comply with all applicable federal, state, and local laws in existence on the effective date of this ITP or adopted thereafter.
- 2. ESA Compliance:** Permittee shall implement and adhere to the terms and conditions related to the Covered Species in the *Endangered Species Act Section 7(a)(2) Biological Opinion*, and *Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response and Fish and Wildlife Coordination Act Recommendations for the NOAA Restoration Center's Program to Facilitate Implementation of Restoration Projects in the Central Valley of California* (WCR-2017-8532) for the Project pursuant to the Federal Endangered Species Act (ESA). For purposes of this ITP, where the terms and conditions for the Covered Species in the federal authorization are less protective of the

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Covered Species or otherwise conflict with this ITP, the conditions of approval set forth in this ITP shall control.

- 3. ITP Time Frame Compliance:** Permittee shall fully implement and adhere to the conditions of this ITP within the time frames set forth below and as set forth in the Mitigation Monitoring and Reporting Program (MMRP), which is included as Attachment 1 to this ITP.

4. General Provisions:

- 4.1. Designated Representative.** Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.
- 4.2. Designated Biologist.** Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist is knowledgeable and experienced in the biology, natural history, and collecting and handling of the Covered Species. The Designated Biologist shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist in writing before starting Covered Activities and shall also obtain approval in advance in writing if the Designated Biologist must be changed.
- 4.3. Designated Biologist Authority.** To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist shall have authority to immediately stop any activity that does not comply with this ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.
- 4.4. Education Program.** Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall provide interpretation for non-English

speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures.

- 4.5. Construction Monitoring Notebook. The Designated Biologist shall maintain a construction-monitoring notebook on-site throughout the construction period, which shall include a copy of this ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring notebook is available for review at the Project site upon request by CDFW.
- 4.6. Trash Abatement. Permittee shall initiate a trash abatement program before starting Covered Activities and shall continue the program for the duration of the Project. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed at least once a week to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.
- 4.7. Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist. Permittee shall keep the amount of water used to the minimum amount needed, and shall not allow water to form puddles.
- 4.8. Erosion Control Materials. Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting (erosion control matting) or similar material, in potential Covered Species' habitat.
- 4.9. Delineation of Property Boundaries. Before starting Covered Activities along each part of the route in active construction, Permittee shall clearly delineate the boundaries of the Project Area with fencing, stakes, or flags. Permittee shall restrict all Covered Activities to within the fenced, staked, or flagged areas. Permittee shall maintain all fencing, stakes, and flags until the completion of Covered Activities in that area.
- 4.10. Delineation of Habitat. Permittee shall clearly delineate habitat of the Covered Species within the Project Area with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat.
- 4.11. Project Access. Project-related personnel shall access the Project Area using existing routes, or routes identified in the Project Description, and shall not cross

Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas. If Permittee determines construction of routes for travel are necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before carrying out such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species will occur as a result of the Project modification.

- 4.12. Staging Areas.** Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project Area using, to the extent possible, previously disturbed areas. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area unless provided for as described in Condition of Approval 4.11 of this ITP.
- 4.13. Hazardous Waste.** Permittee shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.
- 4.14. CDFW Access.** Permittee shall provide CDFW staff with reasonable access to the Project and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.
- 4.15. Refuse Removal.** Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all temporary fill and construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.

5. Monitoring, Notification and Reporting Provisions:

- 5.1. Notification Before Commencement.** The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.
- 5.2. Notification of Non-compliance.** The Designated Representative shall immediately notify CDFW in writing if it determines that the Permittee is not in compliance with any Condition of Approval of this ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this ITP and/or the

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MMRP. The Designated Representative shall report any non-compliance with this ITP to CDFW within 24 hours.

- 5.3. Compliance Monitoring.** The Designated Biologist shall be on-site daily when Covered Activities occur. The Designated Biologist shall conduct compliance inspections to (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this ITP; (4) check all exclusion zones; and (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area. The Designated Representative or Designated Biologist shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP.
- 5.4. Monthly Compliance Report.** The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition of Approval 5.3 into a Monthly Compliance Report and submit it to CDFW along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Monthly Compliance Reports shall be submitted to the CDFW offices listed in the Notices section of this ITP and via e-mail to CDFW's Regional Representative and Headquarters CESA Program. At the time of this ITP's approval, the CDFW Regional Representative is Adam McKannay, Senior Environmental Scientist – Supervisor, (adam.mckannay@wildlife.ca.gov) and Headquarters CESA Program email is CESA@wildlife.ca.gov. CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.
- 5.5. CNDDDB Observations.** The Designated Biologist shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Monthly Compliance Report or ASR, whichever is submitted first relative to the observation.
- 5.6. Final Mitigation Report.** No later than 45 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Monthly Compliance Reports and all ASRs; (2) a copy of the table in the MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of

the effectiveness of this ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.

5.7. Notification of Take or Injury. Permittee shall immediately notify the Designated Biologist if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (530) 356-5099. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within two calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible provide a photograph, explanation as to cause of take or injury, and any other pertinent information.

6. Take Minimization Measures: The following requirements are intended to ensure the minimization of incidental take of Covered Species in the Project Area during Covered Activities. Permittee shall implement and adhere to the following conditions to minimize take of Covered Species:

6.1. Instream Work Period. In-water work shall be limited to the period of June 15 through October 15, during relatively low flow, high water temperature conditions, and will be suspended during storm events.

6.2. Fish Passage Through Worksite. Adequate fish passage within Deer Creek surrounding the Project site shall be maintained at all times. Unless otherwise directed by CDFW, velocities shall be suitable to allow efficient and safe passage of all aquatic organisms and life stages.

6.3. Monitoring of Turbidity Curtain. During utilization, the turbidity curtain shall be inspected on a regular basis and shall be removed in advance of storm events to avoid risk of damage or loss of the turbidity curtain. Inspection shall ensure that the curtain is properly anchored and turbid water is not escaping. The turbidity curtain shall be maintained throughout the excavation, and rock placement phases of the project to ensure proper function.

6.4. Removal of Turbidity Curtain. Upon completion of the Project, Permittee shall remove the turbidity curtain in a manner that will not introduce silt into the stream.

6.5. Gravels Used as Fill Material. In the event that importation of gravel is necessary,

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only clean, washed alluvial gravels may be used as fill material along the banks of the stream or placed within the stream channel. Permittee shall remove all silt laden gravels from the Project area upon completion of the Project. They shall not be placed where they may enter any waters of the State.

- 6.6. Concrete – Designated Monitor.** At all times when the Permittee is pouring or working with wet concrete where it may enter the stream channel there shall be a designated monitor to inspect the containment structures and ensure that no concrete or other debris enters into the channel outside of those structures.
- 6.7. Concrete – Primary Containment.** The Permittee shall install the necessary containment structures to control the placement of wet concrete and to prevent it from entering the channel outside of those structures. No concrete shall be poured within the ordinary high-water mark (OHWM) if the 15-day weather forecast indicates any chance of rain greater than 30 percent without written approval from CDFW.
- 6.8. Concrete Washout.** Concrete washout shall occur in a designated and appropriately prepared area setback at least 100-feet from the riparian area. Washwater and debris shall not be allowed to enter the stream or riparian area. Concrete washout facilities should be inspected daily and after heavy rains to check for leaks, identify if any plastic linings and sidewalls have been damaged by construction activities, and determine whether they have been filled to over 75 percent capacity. When the washout container is filled to over 75 percent of its capacity, the washwater should be vacuumed off or allowed to evaporate to avoid overflows.
- 6.9. Exclude Concrete from Flowing Stream.** Poured concrete shall be excluded from the wetted channel for a period of 30 days after it is poured. Commercial sealants may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is dry.
- 6.10. Abutment Armoring.** Permittee shall install abutment armoring constructed with suitable non-erodible materials that will withstand wash out. The abutment armoring shall extend above the normal high-water mark. Abutment armor shall consist of clean rock, competent for the application, sized and properly installed to resist washout. Only clean material such as, rock riprap that is free of trash, debris and deleterious material shall be used as bank stabilization. Asphalt and broken concrete shall not be considered an acceptable material.
- 6.11. Cast in Drilled Hole (CIDH) Water Removal.** Water collected in the CIDH casings shall be pumped into settling basins or into Baker tanks for off-site disposal.

- 6.12. CIDH Temporary Casing Fish Monitoring and Relocation.** If a temporary CIDH casing is installed in free standing water, water trapped inside the casing shall be inspected by the Designated Biologist, prior to the next step in CIDH pile construction, immediately following embedment of the temporary casing in the stream bed to ensure that no salmonids or sturgeon have been trapped within the casing (3/32-inch wire mesh would be installed on the bottom of the CIDH casing to prevent entrapment of salmonids or sturgeon inside the casing). Any trapped salmonids or sturgeon shall be removed and returned to the river. The Designated Biologist shall note the number and condition of individuals trapped, the number of individuals relocated, and the date and time of collection and relocation. One or more of the following CDFW/NMFS-approved capture techniques shall be used: dip net, seine, throw net, minnow trap, or hand. Electro fishing may be used if CDFW/NMFS has reviewed and approved the Designated Biologist's qualifications and provided written approval.
- 6.13. Fish Entrainment.** Permittee shall minimize the potential for fish to be entrained during CIDH de-watering or water drafting activities. Pump intakes shall be placed away from undercut banks that may contain habitat for the salmonids. The Permittee shall implement the use of a screen in accordance with the NMFS 1996 Juvenile Fish Screen Criteria for Pump Intakes. Screen material may be constructed of any rigid woven, perforated, or slotted material that provides water passage while physically excluding fish. Round openings in the screen shall not exceed 3/32-inch diameter, square openings shall not exceed 3/32-inch measured diagonally, and slotted openings shall not exceed 0.069 inches in width. Approach velocity shall not exceed 0.33 feet per second.
- 6.14. Design of Access Route.** The access route to the construction site shall be designed so that it does not pool water upstream of the road and risk potential stranding of juvenile salmonids. Downstream of the access road shall be monitored to ensure that no scour holes form and pool water capable of stranding juvenile salmonids.
- 6.15. Stormwater Pollution Prevention Plan (SWPPP).** A copy of the SWPPP or related stormwater management plan shall be provided to CDFW prior to the beginning of Project activities.
- 6.16. Hazardous Substances and Debris.** Construction debris, paint or other coating material, welding products and by-products or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the state. The Permittee shall ensure that all debris, paint overspray, drippings and welding debris are fully contained and unable to enter the stream.

6.17. No New Project Phase without Erosion Control. No phase of the Project may be started if that phase and its associated erosion control measures cannot be completed prior to the onset of a storm event if that construction phase may cause the introduction of sediments into the stream. Permittee shall consult 72-hour weather forecasts from the National Weather Service prior to start of any phase of the Project that may result in sediment runoff to the stream. Erosion control measures shall be inspected frequently, to minimize failure, and repairs conducted immediately.

6.18. Turbidity and Regional Water Board Waste Discharge Requirements. The Permittee or Designated Representative shall monitor instream turbidity levels during project activities and shall adhere to those specifications for turbidity set forth by the Regional Water Quality Control Board's Conditional Waiver of Waste Discharge Requirements issued for this Project.

6.19. Turbidity/Siltation Activities Halted. Upon Department determination that turbidity/siltation levels resulting from project related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation shall be halted until effective Department approved control devices are installed or abatement procedures are initiated.

6.20. Spill Cleanup. Permittee shall begin the cleanup of all spills immediately. CDFW shall be notified immediately by the Permittee of any spills and shall be consulted regarding cleanup procedures. The Permittee shall have all spill clean-up equipment on site during construction.

6.21. Spill Containment. All activities performed in or near a stream shall have absorbent materials designated for spill containment and clean-up activities on-site for use in an accidental spill. The Permittee shall immediately notify the California Emergency Management Agency at 1-800-852-7550 and immediately initiate the clean-up activities. CDFW shall be notified by the Permittee and consulted regarding clean-up procedures.

7. Habitat Management Land Acquisition: CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate Project-related impacts of the taking on the Covered Species that will result with implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation.

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To meet this requirement, the Permittee has purchased 0.01 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank and provided CDFW with a Credit Purchase Agreement and Payment Receipt (Attachment 2).

Amendment:

This ITP may be amended as provided by California Code of Regulations, Title 14, section 783.6, subdivision (c), and other applicable law. This ITP may be amended without the concurrence of the Permittee as required by law, including if CDFW determines that continued implementation of the Project as authorized under this ITP would jeopardize the continued existence of the Covered Species or where Project changes or changed biological conditions necessitate an ITP amendment to ensure that all Project-related impacts of the taking to the Covered Species are minimized and fully mitigated.

Stop-Work Order:

CDFW may issue Permittee a written stop-work order requiring Permittee to suspend any Covered Activity for an initial period of up to 25 days to prevent or remedy a violation of this ITP, including but not limited to the failure to comply with reporting or monitoring obligations, or to prevent the unauthorized take of any CESA endangered, threatened, or candidate species. Permittee shall stop work immediately as directed by CDFW upon receipt of any such stop-work order. Upon written notice to Permittee, CDFW may extend any stop-work order issued to Permittee for a period not to exceed 25 additional days. Suspension and revocation of this ITP shall be governed by California Code of Regulations, Title 14, section 783.7, and any other applicable law. Neither the Designated Biologist nor CDFW shall be liable for any costs incurred in complying with stop-work orders.

Compliance with Other Laws:

This ITP sets forth CDFW's requirements for the Permittee to implement the Project pursuant to CESA. This ITP does not necessarily create an entitlement to proceed with the Project. Permittee is responsible for complying with all other applicable federal, state, and local law.

Notices:

The Permittee shall deliver a fully executed duplicate original ITP by registered first class mail or overnight delivery to the following address:

Habitat Conservation Planning Branch
California Department of Fish and Wildlife
Attention: CESA Permitting Program
Post Office Box 944209
Sacramento, CA 94244-2090

Alternatively, the Permittee shall email the digitally signed ITP to CESA@wildlife.ca.gov. Digital signatures shall comply with Government Code section 16.5.

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Written notices, reports and other communications relating to this ITP shall be delivered to CDFW by email or registered first class mail at the following address, or at addresses CDFW may subsequently provide the Permittee. Notices, reports, and other communications shall reference the Project name, Permittee, and ITP Number (2081-2020-027-01) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Tina Bartlett, Regional Manager
California Department of Fish and Wildlife
Northern Region
601 Locust Street
Redding, CA 96001
Tina.Bartlett@wildlife.ca.gov

and a copy to:

Habitat Conservation Planning Branch
California Department of Fish and Wildlife
Attention: CESA Permitting Program
Post Office Box 944209
Sacramento, CA 94244-2090
CESA@wildlife.ca.gov

Unless Permittee is notified otherwise, CDFW's Regional Representative for purposes of addressing issues that arise during implementation of this ITP is:

Adam McKannay
California Department of Fish and Wildlife
Northern Region
601 Locust Street
Redding, CA 96001
(530) 356-5099
Adam.McKannay@wildlife.ca.gov

Compliance with California Environmental Quality Act (CEQA):

As the "public agency which has the principal responsibility of...approving [the Project]," (Pub. Resources Code, §21067), CDFW is the lead agency for the Project for purposes of complying with the CEQA (CEQA, Pub. Resources Code, §21000 et seq.). CDFW has determined that this Project is exempt from CEQA because it is a Specified Mass Transit Project (Pub. Resources Code, §21080, subd. (b)(10); Cal. Code Regs., tit. 14, §§ 15725). CDFW has filed a Notice of Exemption for the Project.

Incidental Take Permit
No. 2081-2020-027-01
UNION PACIFIC RAILROAD
UPRR BRIDGE REPLACEMENT PROJECT

Findings Pursuant to CESA:

These findings are intended to document CDFW's compliance with the specific findings requirements set forth in CESA and related regulations. (Fish & G. Code § 2081, subs. (b)-(c); Cal. Code Regs., tit. 14, §§ 783.4, subds, (a)-(b), 783.5, subd. (c)(2).)

CDFW finds based on substantial evidence in the ITP application, the results of consultations, and the administrative record of proceedings, that issuance of this ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

- (1) Take of Covered Species as defined in this ITP will be incidental to the otherwise lawful activities covered under this ITP;
- (2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this ITP and as described in the MMRP. Measures include: (1) permanent habitat protection; (2) establishment of avoidance zones; (3) worker education; and (4) Monthly Compliance Reports. CDFW evaluated factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation. Based on this evaluation, CDFW determined that the protection and management in perpetuity of 0.01-acres of compensatory habitat that is contiguous with other protected Covered Species habitat and/or is of higher quality than the habitat being destroyed by the Project, along with the minimization, monitoring, reporting, and funding requirements of this ITP minimizes and fully mitigates the impacts of the taking caused by the Project;
- (3) The take avoidance and mitigation measures required pursuant to the conditions of this ITP and its attachments are roughly proportional in extent to the impacts of the taking authorized by this ITP;
- (4) The measures required by this ITP maintain Permittee's objectives to the greatest extent possible;
- (5) All required measures are capable of successful implementation;
- (6) This ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;
- (7) Permittee has ensured adequate funding to implement the measures required by this ITP as well as for monitoring compliance with, and the effectiveness of, those measures for the Project; and
- (8) Issuance of this ITP will not jeopardize the continued existence of the Covered Species based on the best scientific and other information reasonably available, and

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this finding includes consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities. Moreover, CDFW's finding is based, in part, on CDFW's express authority to amend the terms and conditions of this ITP without concurrence of the Permittee as necessary to avoid jeopardy and as required by law.

Attachments:

FIGURE 1	Project Vicinity Map
FIGURE 2	Project Map
ATTACHMENT 1	Mitigation Monitoring and Reporting Program
ATTACHMENT 2	Credit Purchase Agreement and Payment Receipt

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

8/14/2020

On _____

DocuSigned by:
Tina Bartlett
1D82ADE7303A474...

Tina Bartlett, Regional Manager

Northern Region

ACKNOWLEDGMENT

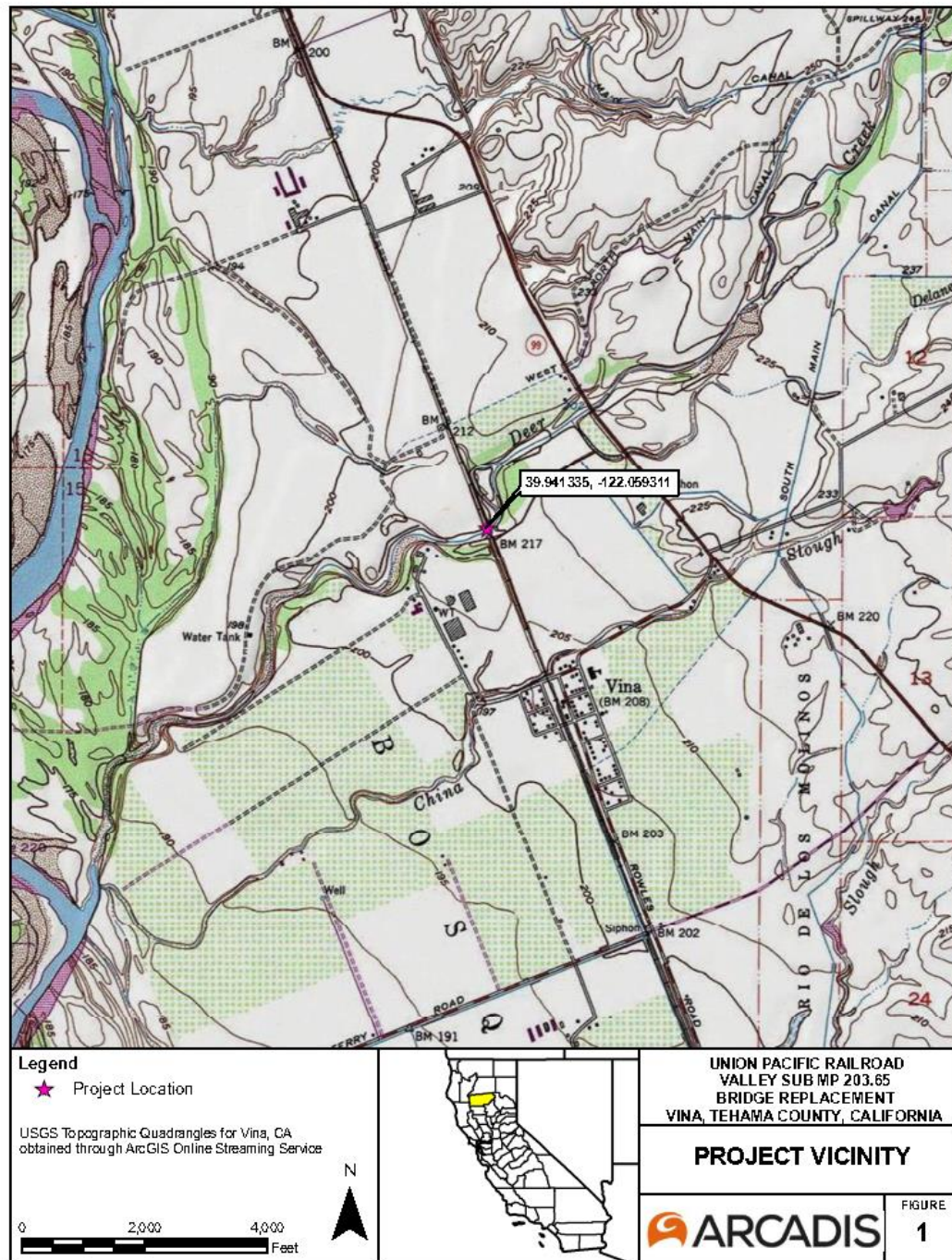
The undersigned: (1) warrants that he or she is acting as a duly authorized representative of the Permittee, (2) acknowledges receipt of this ITP, and (3) agrees on behalf of the Permittee to comply with all terms and conditions

By: *Steve Cheney* Date: 11/17/2020

Printed Name: Steve Cheney Title: Sr. Director Design & Environmental

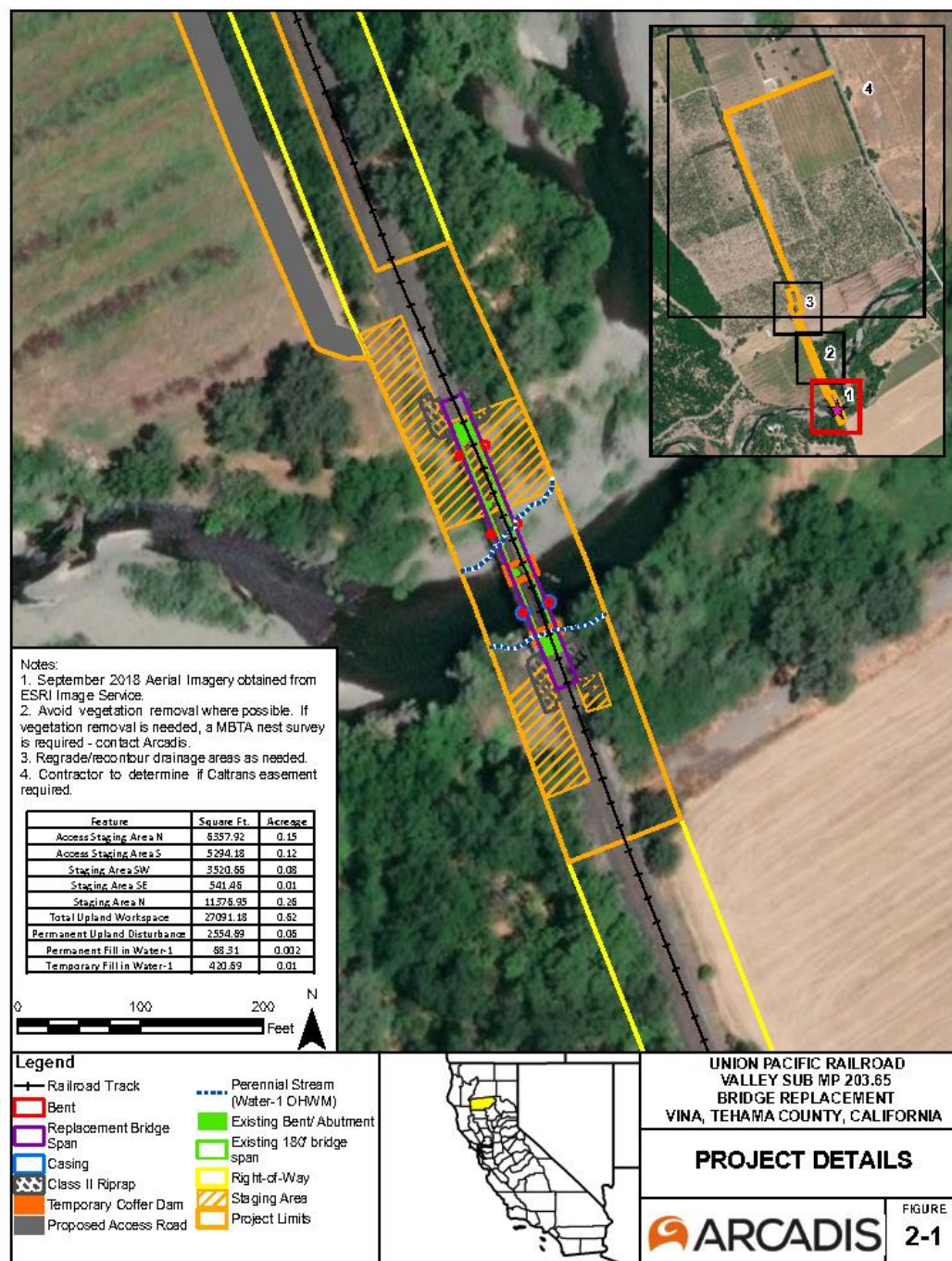
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Figure 1 – Project Vicinity Map



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**UNION PACIFIC RAILROAD
UPRR BRIDGE REPLACEMENT PROJECT**

Figure 2. Project Map



Incidental Take Permit
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UNION PACIFIC RAILROAD
UPRR BRIDGE REPLACEMENT PROJECT

Attachment 1**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)
CALIFORNIA ENDANGERED SPECIES ACT****INCIDENTAL TAKE PERMIT NO. 2081-2020-027-01****PERMITTEE: Union Pacific Railroad****PROJECT: Union Pacific Railroad Bridge Replacement****PURPOSE OF THE MMRP**

The purpose of the MMRP is to ensure that the impact minimization and mitigation measures required by the Department of Fish and Wildlife (CDFW) for the above-referenced Project are properly implemented, and thereby to ensure compliance with section 2081(b) of the Fish and Game Code and section 21081.6 of the Public Resources Code. A table summarizing the mitigation measures required by CDFW is attached. This table is a tool for use in monitoring and reporting on implementation of mitigation measures, but the descriptions in the table do not supersede the mitigation measures set forth in the California Incidental Take Permit (ITP) and in attachments to the ITP, and the omission of a permit requirement from the attached table does not relieve the Permittee of the obligation to ensure the requirement is performed.

OBLIGATIONS OF PERMITTEE

Mitigation measures must be implemented within the time periods indicated in the table that appears below. Permittee has the primary responsibility for monitoring compliance with all mitigation measures and for reporting to CDFW on the progress in implementing those measures. These monitoring and reporting requirements are set forth in the ITP itself and are summarized at the front of the attached table.

VERIFICATION OF COMPLIANCE, EFFECTIVENESS

CDFW may, at its sole discretion, verify compliance with any mitigation measure or independently assess the effectiveness of any mitigation measure.

TABLE OF MITIGATION MEASURES

The following items are identified for each mitigation measure: Mitigation Measure, Source, Implementation Schedule, Responsible Party, and Status/Date/Initials. The Mitigation Measure column summarizes the mitigation requirements of the ITP. The Source column identifies the ITP condition that sets forth the mitigation measure. The Implementation Schedule column shows the date or phase when each mitigation measure will be implemented. The Responsible Party column identifies the person or agency that is primarily responsible for implementing the mitigation measure. The Status/Date/Initials column shall be completed by the Permittee during preparation of each Status Report and the Final Mitigation Report, and must identify the implementation status of each mitigation measure, the date that status was determined, and the initials of the person determining the status.

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
BEFORE DISTURBING SOIL OR VEGETATION					
1	Designated Representative. Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with the ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of the ITP.	ITP Condition # 4.1	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
2	Designated Biologist. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist is knowledgeable and experienced in the biology, natural history, and collecting and handling of the Covered Species. The Designated Biologist shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist in writing before starting Covered Activities and shall also obtain approval in advance in writing if the Designated Biologist must be changed.	ITP Condition # 4.2	Before commencing ground- or vegetation-disturbing activities	Permittee	
3	Education Program. Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in the ITP. Permittee shall provide interpretation for non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures.	ITP Condition # 4.4	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
4	Trash Abatement. Permittee shall initiate a trash abatement program before starting Covered Activities and shall continue the program for the duration of the Project. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed at least once a week to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.	ITP Condition # 4.6	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
5	Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist. Permittee shall keep the amount of water used to the minimum amount needed and shall not allow water to form puddles.	ITP Condition # 4.7	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
6	<u>Delineation of Property Boundaries.</u> Before starting Covered Activities along each part of the route in active construction, Permittee shall clearly delineate the boundaries of the Project Area with fencing, stakes, or flags. Permittee shall restrict all Covered Activities to within the fenced, staked, or flagged areas. Permittee shall maintain all fencing, stakes, and flags until the completion of Covered Activities in that area.	ITP Condition # 4.9	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
7	<u>Delineation of Habitat.</u> Permittee shall clearly delineate habitat of the Covered Species within the Project Area with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat.	ITP Condition # 4.10	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
8	<u>Stormwater Pollution Prevention Plan (SWPPP).</u> A copy of the SWPPP or related stormwater management plan shall be provided to CDFW prior to the beginning of Project activities.	ITP Condition # 6.15	Before commencing ground- or vegetation-disturbing activities	Permittee	
9	<u>Notification Before Commencement.</u> The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.	ITP Condition # 5.1	Before commencing ground- or vegetation-disturbing activities	Permittee	
10	<u>Covered Species Credits.</u> Permittee has purchased 0.01 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank and provided CDFW with a Credit Purchase Agreement and Payment Receipt.	ITP Condition # 7	Before commencing ground- or vegetation-disturbing activities	Permittee	
DURING CONSTRUCTION					
11	<u>Designated Biologist Authority.</u> To ensure compliance with the Conditions of Approval of the ITP, the Designated Biologist shall have authority to immediately stop any activity that does not comply with the ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.	ITP Condition # 4.3	Entire Project	Permittee	
12	<u>Construction Monitoring Notebook.</u> The Designated Biologist shall maintain a construction-monitoring notebook on-site throughout the construction period, which shall include a copy of the ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring notebook is available for review at the Project site upon request by CDFW.	ITP Condition # 4.5	Entire Project	Permittee	
13	<u>Erosion Control Materials.</u> Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting (erosion control matting) or similar material, in potential Covered Species' habitat.	ITP Condition # 4.8	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
14	<u>Project Access.</u> Project-related personnel shall access the Project Area using existing routes, or routes identified in the Project Description, and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas. If Permittee determines construction of routes for travel are necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before carrying out such an activity. CDFW may require an amendment to the ITP, among other reasons, if additional take of Covered Species will occur as a result of Project modification.	ITP Condition # 4.11	Entire Project	Permittee	
15	<u>Staging Areas.</u> Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project Area using, to the extent possible, previously disturbed areas. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area unless provided for in Condition 4.11 of the ITP.	ITP Condition # 4.12	Entire Project	Permittee	
16	<u>Hazardous Waste.</u> Permittee shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.	ITP Condition # 4.13	Entire Project	Permittee	
17	<u>CDFW Access.</u> Permittee shall provide CDFW staff with reasonable access to the Project and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in the ITP.	ITP Condition # 4.14	Entire Project	Permittee	
18	<u>Notification of Non-compliance.</u> The Designated Representative shall immediately notify CDFW in writing if it determines that the Permittee is not in compliance with any Condition of Approval of the ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in the ITP and/or this MMRP. The Designated Representative shall report any non-compliance with the ITP to CDFW within 24 hours.	ITP Condition # 5.2	Entire Project	Permittee	
19	<u>Compliance Monitoring.</u> The Designated Biologist shall be on-site daily when Covered Activities occur. The Designated Biologist shall conduct compliance inspections to (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of the ITP; (4) check all exclusion zones; and (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area. The Designated Representative or Designated Biologist shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by the ITP.	ITP Condition # 5.3	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
20	Monthly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition 5.3 into a Monthly Compliance Report and submit it to CDFW along with a copy of this MMRP table with notes showing the current implementation status of each mitigation measure. Monthly Compliance Reports shall be submitted to CDFW offices listed in the Notices section of the ITP and via e-mail to CDFW's Regional Representative and Headquarters CESA Program. At the time of the ITP's approval, the CDFW Regional Representative is Adam McKannay, Senior Environmental Scientist - Supervisor (adam.mckannay@wildlife.ca.gov) and Headquarters CESA Program email is CESA@wildlife.ca.gov . CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.	ITP Condition # 5.4	Entire Project	Permittee	
22	CNDDB Observations. The Designated Biologist shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Monthly Compliance Report or ASR, whichever is submitted first relative to the observation.	ITP Condition # 5.6	Entire Project	Permittee	
23	Notification of Take or Injury. Permittee shall immediately notify the Designated Biologist if a Covered Species is killed or taken by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (530) 356-5099. The initial notification to CDFW shall include information regarding the location, species, number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within two calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible, provide a photograph, explanation as to cause of take or injury, and any other pertinent information.	ITP Condition # 5.8	Entire Project	Permittee	
24	Instream Work Period. In-water work shall be limited to the period of June 15 through October 15, during relatively low flow, high water temperature conditions, and will be suspended during storm events.	ITP Condition # 6.1	Entire Project	Permittee	
25	Fish Passage Through Worksite. Adequate fish passage within Deer Creek surrounding the Project site shall be maintained at all times. Unless otherwise directed by CDFW, velocities shall be suitable to allow efficient and safe passage of all aquatic organisms and life stages.	ITP Condition # 6.2	Entire Project	Permittee	
26	Monitoring of Turbidity Curtain. During utilization, the turbidity curtain shall be inspected on a regular basis and shall be removed in advance of storm events to avoid risk of damage or loss of the turbidity curtain. Inspection shall ensure that the curtain is properly anchored and turbid water is not escaping. The turbidity curtain shall be maintained throughout the excavation, and rock placement, and phases of the project to ensure proper function.	ITP Condition # 6.3	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
27	<u>Gravels Used as Fill Material.</u> In the event that importation of gravel is necessary, only clean, washed alluvial gravels may be used as fill material along the banks of the stream or placed within the stream channel. Permittee shall remove all silt laden gravels from the Project area upon completion of the Project. They shall not be placed where they may enter any waters of the State.	ITP Condition # 6.5	Entire Project	Permittee	
28	<u>Concrete – Designated Monitor.</u> At all times when the Permittee is pouring or working with wet concrete where it may enter the stream channel there shall be a designated monitor to inspect the containment structures and ensure that no concrete or other debris enters into the channel outside of those structures.	ITP Condition # 6.6	Entire Project	Permittee	
29	<u>Concrete – Primary Containment.</u> The Permittee shall install the necessary containment structures to control the placement of wet concrete and to prevent it from entering the channel outside of those structures. No concrete shall be poured within the ordinary high-water mark (OHWM) if the 15-day weather forecast indicates any chance of rain greater than 30 percent without written approval from CDFW.	ITP Condition # 6.7	Entire Project	Permittee	
30	<u>Concrete Washout.</u> Concrete washout shall occur in a designated and appropriately prepared area setback at least 100-feet from the riparian area. Washwater and debris shall not be allowed to enter the stream or riparian area. Concrete washout facilities should be inspected daily and after heavy rains to check for leaks, identify if any plastic linings and sidewalls have been damaged by construction activities, and determine whether they have been filled to over 75 percent capacity. When the washout container is filled to over 75 percent of its capacity, the washwater should be vacuumed off or allowed to evaporate to avoid overflows.	ITP Condition # 6.8	Entire Project	Permittee	
31	<u>Exclude Concrete from Flowing Stream.</u> Poured concrete shall be excluded from the wetted channel for a period of 30 days after it is poured. Commercial sealants may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is dry.	ITP Condition # 6.9	Entire Project	Permittee	
32	<u>Abutment Armoring.</u> Permittee shall install abutment armoring constructed with suitable non-erodible materials that will withstand wash out. The abutment armoring shall extend above the normal high-water mark. Abutment armor shall consist of clean rock, competent for the application, sized and properly installed to resist washout. Only clean material such as, rock riprap that is free of trash, debris and deleterious material shall be used as bank stabilization. Asphalt and broken concrete shall not be considered an acceptable material.	ITP Condition # 6.10	Entire Project	Permittee	
33	<u>Cast in Drilled Hole (CIDH) Water Removal.</u> Water collected in the CIDH casings shall be pumped into settling basins or into Baker tanks for off-site disposal.	ITP Condition # 6.11	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
34	CIDH Temporary Casing Fish Monitoring and Relocation. If a temporary CIDH casing is installed in free standing water, water trapped inside the casing shall be inspected by the Designated Biologist, prior to the next step in CIDH pile construction, immediately following embedment of the temporary casing in the stream bed to ensure that no salmonids or sturgeon have been trapped within the casing (3/32-inch wire mesh would be installed on the bottom of the CIDH casing to prevent entrapment of salmonids or sturgeon inside the casing). Any trapped salmonids or sturgeon shall be removed and returned to the river. The Designated Biologist shall note the number and condition of individuals trapped, the number of individuals relocated, and the date and time of collection and relocation. One or more of the following CDFW/NMFS-approved capture techniques shall be used: dip net, seine, throw net, minnow trap, or hand. Electro fishing may be used if CDFW/NMFS has reviewed and approved the Designated Biologist's qualifications and provided written approval.	ITP Condition # 6.12	Entire Project	Permittee	
35	Fish Entrainment. Permittee shall minimize the potential for fish to be entrained during CIDH dewatering or water drafting activities. Pump intakes shall be placed away from undercut banks that may contain habitat for the salmonids. The Permittee shall implement the use of a screen in accordance with the NMFS 1996 Juvenile Fish Screen Criteria for Pump Intakes. Screen material may be constructed of any rigid woven, perforated, or slotted material that provides water passage while physically excluding fish. Round openings in the screen shall not exceed 3/32-inch diameter, square openings shall not exceed 3/32-inch measured diagonally, and slotted openings shall not exceed 0.069 inches in width. Approach velocity shall not exceed 0.33 feet per second.	ITP Condition # 6.13	Entire Project	Permittee	
36	Design of Access Route. The access route to the boat ramp shall be designed so that it does not pool water upstream of the road and risk potential stranding of juvenile salmonids. Downstream of the access road shall be monitored to ensure that no scour holes form and pool water capable of stranding juvenile salmonids.	ITP Condition # 6.14	Entire Project	Permittee	
37	Hazardous Substances and Debris. Construction debris, paint or other coating material, welding products and by-products or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the state. The Permittee shall ensure that all debris, paint overspray, drippings and welding debris are fully contained and unable to enter the stream.	ITP Condition # 6.16	Entire Project	Permittee	
38	No New Project Phase without Erosion Control. No phase of the Project may be started if that phase and its associated erosion control measures cannot be completed prior to the onset of a storm event if that construction phase may cause the introduction of sediments into the stream. Permittee shall consult 72-hour weather forecasts from the National Weather Service prior to start of any phase of the Project that may result in sediment runoff to the stream. Erosion control measures shall be inspected frequently, to minimize failure, and repairs conducted immediately.	ITP Condition # 6.17	Entire Project	Permittee	
39	Turbidity and Regional Water Board Waste Discharge Requirements. The Permittee or Designated Representative shall monitor instream turbidity levels during project activities and shall adhere to those specifications for turbidity set forth by the Regional Water Quality Control Board's Conditional Waiver of Waste Discharge Requirements issued for this Project.	ITP Condition # 6.18	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
40	<u>Turbidity/Siltation Activities Halted.</u> Upon Department determination that turbidity/siltation levels resulting from project related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation shall be halted until effective Department approved control devices are installed or abatement procedures are initiated.	ITP Condition # 6.19	Entire Project	Permittee	
41	<u>Spill Cleanup.</u> Permittee shall begin the cleanup of all spills immediately. CDFW shall be notified immediately by the Permittee of any spills and shall be consulted regarding cleanup procedures. The Permittee shall have all spill clean-up equipment on site during construction.	ITP Condition # 6.20	Entire Project	Permittee	
42	<u>Spill Containment.</u> All activities performed in or near a stream shall have absorbent materials designated for spill containment and clean up activities on-site for use in an accidental spill. The Permittee shall immediately notify the California Emergency Management Agency at 1-800-852-7553 and immediately initiate the clean up activities. CDFW shall be notified by the Permittee and consulted regarding clean-up procedures.	ITP Condition # 6.21	Entire Project	Permittee	
POST-CONSTRUCTION					
43	<u>Refuse Removal.</u> Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all temporary fill and construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.	ITP Condition # 4.15	Post-construction	Permittee	
44	<u>Removal of Turbidity Curtain.</u> Upon completion of the Project, Permittee shall remove the turbidity curtain in a manner that will not introduce silt into the stream.	ITP Condition # 6.4	Post-construction	Permittee	
45	<u>Final Mitigation Report.</u> No later than 45 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Monthly Compliance Reports and all ASRs; (2) a copy of the table in this MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of the effectiveness of the ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.	ITP Condition # 5.7	Post-construction and after completion of mitigation	Permittee	
46	CDFW accepts the Final Mitigation Report as complete.	ITP Condition # 5.7	Post-construction and after completion of mitigation	CDFW	

Attachment 2. Credit Purchase Agreement and Payment Receipt

Bullock Bend Mitigation Bank Credit Purchase Agreement

2020

CREDIT PURCHASE AGREEMENT AND PAYMENT RECEIPT FORMS

AGREEMENT FOR SALE OF MITIGATION CREDITS

This Agreement is entered into this 2 day of July, 2020, by and between Bullock Bend Mitigation Bank ("Bank") and the Union Pacific Railroad Company (UPRR) ("Project Applicant"), jointly referred to as the "Parties," as follows:

RECITALS

A. The Bank Owner has developed the Bullock Bend Mitigation Bank located in Yolo County, California; and

B. The Bank was approved by National Oceanic & Atmospheric Administration Fisheries ("NOAA"), U.S. Army Corps of Engineers ("Corps"), U.S. Environmental Protection Agency ("EPA"), U.S. Fish and Wildlife Service ("USFWS"), and California Department of Fish and Wildlife ("CDFW") (jointly referred to as "Resource Agencies") on June 30th, 2016 and is currently in good standing with these agencies; and

C. The Bank has received approval from the Resource Agencies to offer 'salmonid' Credits for sale as compensation for the loss of either Chinook salmon (*Oncorhynchus tshawytscha*) and steelhead (*Oncorhynchus mykiss*) plus their habitat, Credits for Swainson's hawk (*Buteo swainsoni*) plus its habitat, Credits for riparian habitat, and Credits for "Other Waters of the U.S." as compensation for impacts to wetlands regulated by the federal and State Endangered Species Acts, the federal Fish and Wildlife Coordination Act, and the federal Clean Water Act, through the *Bullock Bend Mitigation Bank Enabling Instrument* ("Bank Agreement"); and

D. Project Applicant is seeking to implement the Valley Subdivision Mile Post 203.65 Bridge Replacement Project described in Exhibit "A" attached hereto ("Project"), which would unavoidably and adversely impact sensitive biological resources, including 0.01 acres of stream impacts, and seeks to compensate for the adverse temporal impact to sensitive biological resources by purchasing Credits from the Bank; and

E. Project Applicant has been authorized by the California Department of Fish and Wildlife (CDFW) to purchase from the Bank 0.01 credits upon confirmation by the Bank Owner of credit availability/adequate balance of credits remaining for sale; and

F. Project Applicant desires to purchase from Bank and Bank desires to sell to Project Applicant 0.01 Salmonid Riverine Riparian credits;

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Bank hereby sells to Project Applicant and Project Applicant hereby purchases from Bank 0.01 Salmonid Riverine Riparian credits for the purchase price of \$1,600.00. The Bank will then deliver to Project Applicant an executed Bill of Sale in the manner and form as attached hereto and marked as Exhibit "B". The purchase price for said credits shall be paid by cashier's check.

Westervelt Ecological Services, LLC

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Bullock Bend Mitigation Bank Credit Purchase Agreement

2020

2. The sale and transfer herein is not intended as a sale or transfer to Project Applicant of a security, license, lease, easement, or possessory or non-possessory interest in real property, nor the granting of any interest of the foregoing.

3. Project Applicant shall have no obligation whatsoever by reason of the purchase of the Credits, to support, pay for, monitor, report on, sustain, continue in perpetuity, or otherwise be obligated or liable for the success or continued expense or maintenance in perpetuity of the credits sold, or the Bank. Pursuant to the Bank Agreement and any amendments thereto, Bank shall monitor and make reports to the appropriate agency or agencies on the status of any Credits sold to Project Applicant. Bank shall be fully and completely responsible for satisfying any and all conditions placed on the Bank or the Credits by all state or federal jurisdictional agencies.

4. The Credits sold and transferred to Project Applicant shall be non-transferable and non-assignable, and shall not be used as compensatory mitigation for any other Project or purpose, except as set forth herein.

5. Project Applicant must exercise his/her/its right to purchase the Credits within 30 days of the date of this Agreement.

6. Upon purchase of the credits specified in paragraph D above, the Bank shall submit to the parties listed in the Notices section of the Bank Agreement / Bank Enabling Instrument, copies of the: a) Agreement for Sale of Credits; b) Bill of Sale; c) Payment Receipt; and d) an updated ledger. The updated inventory / ledger must detail: i) Project Applicant; ii) Project Name; iii) Status (sale complete/sale not complete); iv) Credit Sale Date; v) NOAA File Number (if applicable); vi) Corps File Number (if applicable); vii) USFWS File Number (if applicable); viii) CDFW File Number (if applicable); ix) Total Number of Credits Authorized to Sell; x) Total Number of Credits Sold to Date (inclusive); and xi) Balance of all Credits Available. The inventory / ledger should include all sales data from bank opening/establishment to the present.

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first above written.

BANK:

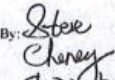
Bullock Bend Mitigation Bank

By: 

Date: 6/22/2020

PROJECT APPLICANT:

Union Pacific Railroad Company

By:  Date: 6/19/2020
Steve Cheney
Sr. Director Design & Environmental

Westervelt Ecological Services, LLC

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Exhibit "A"

**DESCRIPTION OF PROJECT
TO BE
MITIGATED**Permit Numbers: **5A34CR00785****Project Description:**

The purpose of the Project is to replace the existing 3-span, 180-foot-long deck plate girder open deck bridge over Deer Creek. The existing bridge, originally constructed in 1897, has outlived its useful life and must be replaced for continued and improved passenger and freight rail service in the region.

To minimize impacts to Deer Creek from heavy equipment during construction, UPRR will use two temporary work bridges, consisting of 45-foot spans. Three new bridge bents will be installed using drilled shafts. There will be two shafts per each of the three bents. New backwalls will be constructed on the north and south abutments.

Using demolition equipment from upland areas or temporary bridges, UPRR will remove all existing bridge structures, including tracks, two bridge bents, backwalls, and abutments. The existing northern pier and abutment are located in upland areas. The existing southern bent is in Deer Creek. The ground around the existing bridge bents will be excavated so that the bents can be cut three feet below the ground surface and removed. All work will occur from the temporary work bridges or upland areas. The existing bent within the OHWM will be dewatered, if necessary, using supersacks to create a cofferdam. After the bents are removed three feet below ground surface, the material removed will be used as fill and clean gravel appropriate for anadromous species will also be used as backfill.

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Exhibit "B"

BILL OF SALE

In consideration of **\$1,600.00**, receipt of which is hereby acknowledged, *Bullock Bend Mitigation Bank* does hereby bargain, sell and transfer to the UPRR (*Project Applicant*) **0.01 Salmonid Riverine Riparian credits** in the *Bullock Bend Mitigation Bank* in Yolo County, California, developed, and approved by the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, NOAA Fisheries, and California Department of Fish and Wildlife.

Westervelt Ecological Services, LLC ("Westervelt") represents and warrants that it has good title to the credits, has good right to sell the same, and that they are free and clear of all claims, liens, or encumbrances.

Westervelt covenants and agrees with the buyer to warrant and defend the sale of the credits hereinbefore described against all and every person and persons whomsoever lawfully claiming or to claim the same.

DATED: 7-2-20

Bullock Bend Mitigation Bank

By: 

Bullock Bend Mitigation Bank

Westervelt Ecological Services, LLC

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MITIGATION CREDITS: PAYMENT RECEIPT**PARTICIPANT INFORMATION**

Name: Union Pacific Railroad
Address: 1400 Douglas St. Stop 0910 Omaha, Nebraska 68179
Telephone: 402.544.3227
Contact: Steve Cheney

PROJECT INFORMATION

Project Description: Valley Subdivision Mile Post 203.65 Bridge Replacement
Species/Habitat Affected: Central Valley Spring-run Chinook habitat
Credits to be Purchased: 0.01 Salmonid Riverine Riparian credits
Payment Amount: \$1,600.00
Project Location: near Vina, California
County/Address: Tehama

PAYMENT INFORMATION

Payee: Westervelt Ecological Services, LLC

Payer: UPRR

Amount: One Thousand Six Hundred Dollars

Method of payment: Cash ☒ Check No. 300742 Money Order No. _____Received by: [Signature] Date: 7-2-20

(Signature)

Name: Travis Hemmen Title: Vice president

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Notice of Exemption**- 1 -****To:**

Office of Planning and Research
 For U.S. Mail:
 P.O. Box 3044
 Sacramento, CA 95812-3044

From:

Department of Fish and Wildlife
 Region 1 - Northern
 601 Locust Street
 Redding, California 96001

**Street Address:**

1400 Tenth Street
 Sacramento, CA 95814

Project Title: Union Pacific Railroad Bridge Replacement (California Endangered Species Act Incidental Take Permit No. 2081-2020-027-01 (ITP))

Project Location (include county): The Union Pacific Railroad (UPRR) Bridge Replacement Project (Project) is located on Deer Creek within the UPRR right-of-way (ROW), Tehama County, at approximately 39.941335° North, -122.059300° West.

Project Description: The Project includes the replacement of the existing 3-span, 180-foot-long deck plate girder open deck bridge. UPRR plans to replace the entire bridge with three 69-foot beam span ballast deck-bridge girders, one 45-foot pre-stressed concrete box (PCB) girder on the north side, and timber ties. The new bridge will total 252-feet in length and have an opening area of 3,429-square feet. Upland Project activities include removal and replacement of existing northern and southern abutments, construction of new backwalls, and other activities. The southern abutment will be moved approximately 35 feet south, and the northern abutment will be moved approximately 25 feet north. The banks on either side of the new abutments will be regarded to a 2:1 slope and Class 2 riprap will be placed from the abutment to the edge of, but not internal to, the ordinary high water mark (OHWM) for bank stabilization.

The Project will result in permanent impacts to 0.002-acres of Central Valley Spring-Run Chinook Salmon (*Oncorhynchus tshawytscha*) habitat including temporary impacts to 0.01 acres; however, the Project will result in a net increase of approximately 0.004-acres of Central Valley Spring-Run Chinook Salmon habitat due to the new design requiring less pier, abutment, and riprap area below the top of bank compared to the current bridge. The project is expected to result in incidental take of Central Valley Spring-Run Chinook Salmon, which is designated as a threatened species under the California Endangered Species Act. The ITP referenced above as issued by CDFW authorizes incidental take of species listed under CESA that may occur as a result of Project implementation.

Public Agency Approving Project: CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Person or Public Agency Carrying Out Project: Union Pacific Railroad

Exempt Status:

- ☒ Statutory Exemption. Type – Specified Mass Transit Projects, title 15, section 15275
- ☒ Categorical Exemption. Type – **Class 3; California Code of Regulations, title 14, section 15303**, CEQA does not apply to the following mass transit projects:
- (a) The institution or increase of passenger or commuter service on rail lines or high-occupancy vehicle lanes already in use, including the modernization of existing stations and parking facilities;
 - (b) Facility extensions not to exceed four miles in length which are required for transfer of passengers from or to exclusive public mass transit guideway or busway public transit services.

Reasons why project is exempt: Project is being undertaken to modernize passenger and commuter rail facilities. There are no unusual circumstances that would result in a reasonable possibility of a significant effect.

CDFW Contact Person: Adam McKannay, adam.mckannay@wildlife.ca.gov, (530) 356-5099

DocuSigned by:

Tina Bartlett

Signature: 1D82ADE7303A474...

8/14/2020

Date:

Tina Bartlett, Regional Manager
 Northern Region

Notice of Exemption

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Date received for filing at OPR: _____