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October 26, 2020

Governor's Office of Planning & Research

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**Oct 28 2020**

## STATE CLEARINGHOUSE

Subject: Manthey Road Bridge Replacement Project, Joint Mitigated Negative Declaration/Environmental Assessment, SCH No. 2020090220, City of Lathrop, San Joaquin County

Dear Mr. King:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt a Mitigated Negative Declaration/Environmental Assessment from the City of Lathrop for the Manthey Road Bridge Replacement Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup>

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

### CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. [Fish and Game Code, §§ 711.7, subd. (a) and 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may

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<sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish and Game Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish and Game Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

## **PROJECT DESCRIPTION SUMMARY**

**Proponent:** City of Lathrop (CEQA lead agency) and California Department of Transportation (Caltrans) (NEPA lead agency).

**Objective:** The objective of the Project is to replace the Manthey Road Bridge with a new bridge downstream of the existing railroad bridge. The existing Manthey Road Bridge will be demolished. The new bridge will measure approximately 532 feet long by 53 feet wide and will be supported by three sets of two piers supported by cast-in-steel shell piles in the river and abutments on both ends supported by cast-in-drilled-hole piles. The bridge superstructure will be precast, prestressed concrete bulb-tee girders with a cast-in-place concrete deck or a cast-in-place, post-tensioned concrete box girder. The Project will also construct a one-mile-long segment of Golden Valley Parkway which will extend from Brookhurst Boulevard in the north heading southward, turn to the west, cross the San Joaquin River on the new bridge alignment, and connect to Stewart Road in the River Island development west of the river. Primary Project activities include proposed bridge construction, existing bridge demolition, in-water construction activities such as pile driving, 84-inch diameter steel casing installation, temporary trestle and scaffolding installation, cofferdam installation, demolition of existing bridge foundations, construction of new bridge foundations and columns, rock slope protection placement, and roadway construction.

**Location:** The Project is located in the City of Lathrop, San Joaquin County. The new bridge will be replaced approximately 0.3 miles northeast of Stewart Road in the City of Lathrop. Manthey Road runs southwest-northeast, parallel to Interstate 5 (I-5). It crosses the San Joaquin river northwest of I-5, providing connectivity to the River Island and Mossdale Village developments. The Project extends from west of the San Joaquin River at Lakeside Drive/Stewart Road to Brookhurst Boulevard, a distance of approximately one mile. The GPS coordinates are 37°47'15" N, 121°18'29" W.

**Timeframe:** Construction will occur in two phases. Phase 1 (construction of the proposed bridge) will take approximately 18 months and begin in summer 2022. It would occur over two construction seasons. Phase 2 (demolishing the existing bridge) will take 8 months and will begin in spring. It will occur over a single construction season.

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## **COMMENTS AND RECOMMENDATIONS**

CDFW offers the comments and recommendations below to assist City of Lathrop in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

### **Comment 1: Mitigation measures do not define floristic survey protocol**

The MND/EA states that botanical surveys were conducted in 2014. CDFW recommends that the Project area be surveyed for special-status plants by a qualified botanist following the *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities (2018)*, which can be found online at <https://wildlife.ca.gov/Conservation/Survey-Protocols>. This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary.

To correct this, CDFW recommends that botanic surveys for special-status plants are performed per the most current version of CDFW's *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities (2018)* and the survey findings are reported in a revised and recirculated MND/EA. Special-status plant surveys should be performed by a qualified botanist according to the protocols.

### **Comment 2: Mitigation Measure needed to mitigate impacts to special-status plants to less-than-significant**

The MND/EA does not reduce impacts to a level of less-than-significant by identifying compensatory mitigation in the event impacts to special-status plants cannot be fully avoided, or requiring CESA compliance through take authorization in the event CESA-listed plant species will be impacted by Project activities.

To correct this, CDFW recommends the MND includes a measure defining compensatory mitigation in the event impacts to special-status plants are not fully avoidable. CDFW recommends the MND/EA includes a requirement for compensatory mitigation impacts to special-status plant species and their habitats at a minimum of 3:1 mitigation ratio (habitat conserved under a conservation easement to impacted habitat) for all permanent impacts and those related to compaction where the soils may take years to recover to baseline conditions. CDFW also recommends inclusion of language defining the Project's obligation to obtain CESA-listed plant take coverage through an Incidental Take Permit (ITP) issued by CDFW when take of Rare, Threatened, or Endangered plants, cannot be fully avoided.

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**Comment 3: Mitigation measure revisions needed to mitigate impacts to fish to less-than-significant**

1. *In-Water Work Window.* Proposed activities described are likely to result in take of special-status fish species within the Project area, especially Delta smelt (*Hypomesus transpacificus*), Chinook salmon (*Oncorhynchus tshawytscha*) Central Valley fall/late fall-run Evolutionarily Significant Unit (ESU), Central Valley spring-run ESU, steelhead (*Oncorhynchus mykiss irideus*) Central Valley Distinct Population Segment (DPS), and green sturgeon (*Acipenser medirostris*) Southern DPS. Life stages of these fish species could be present at the Project site within June. Due to the Project occurring within designated critical habitat for these species, and the CESA and ESA status of these particular runs, allowing the in-water work window to start before August 1 increases the possibility of impacts to these protected species during a very vulnerable life stage. This includes direct and indirect take from bridge support pier installation, coffer dam dewatering, barotrauma from pile driving, and short-term decreased water quality due to Project-related turbidity.

To address this, CDFW recommends that the in-water seasonal work window be revised to incorporate the restricted in-water work window of August 1 to November 30 (instead of June 1 to October 31) to avoid impacts to Delta smelt, Chinook salmon, steelhead, and green sturgeon. Alternately, a more precise in-water work window can be developed and presented in the MND/EA by gathering temperature data, providing an analysis of the temperature data that shows what months the Project area will not support special-status fish species, and proposing a work window in which special-status fish species will not be present. In the event Project logistics require work outside the recommended in-water work window, CDFW recommends inclusion of language defining the Project's obligation to obtain CESA-listed fish take coverage through an ITP issued by CDFW that would allow for Project-related work to occur outside the restricted work window.

2. *Hydroacoustic Impact.* To further address revised mitigation measures for fish, the MND/EA presented an assessment of hydroacoustic impact using the National Marine Fisheries Service Pile Driving Calculator. It showed that the peak sound pressure level will exceed the threshold when driving 14-inch to 18-inch steel H piles, 14-inch to 18-inch diameter steel pipe piles, the peak sound pressure level and the cumulative sound exposure level thresholds will be exceeded when driving the 84-inch diameter steel shell piles (the permanent bridge piers), and peak sound pressure level threshold will be exceeded when driving 14- to 18-inch steel H piles if barges are used and spud piles are driven into the substrate to anchor the barges. The barges will also be used and moved outside of the in-water work window. If exceedance of 206 decibels (dB) peak sound pressure level and/or 183 decibels (dB) of cumulative sound exposure level is expected, CDFW recommends

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inclusion of language defining the Project's obligation to obtain CESA-listed fish take coverage through an ITP issued by CDFW that would allow for Project-related impacts due to the exceedance that will occur outside of the CDFW-recommended in-water work window.

3. *Fish Passage*. Page 18 of the MND/EA explains that three cofferdams will be constructed in the channel and left in place, which when based on a summer river flow width of approximately 330 feet; the cumulative cofferdam width would represent a maximum of approximately 29% of total channel cross-section of the San Joaquin River. Two issues that could impact fish passage are fish predator ambush potential and hydroacoustic impact area in combination with the presence of the cofferdams in the river. First, the presence of the cofferdams may create an in-water environment conducive to predation on native fish. Water currents interacting with solid structures create areas of differing water velocity. Predatory fish lie in wait within the "slack," calmer water to ambush fish passing by in faster, more turbulent water. Second, work is proposed to start in June, which overlaps with the presence of green sturgeon, possible presence of Central Valley steelhead, possible presence of Spring-run Chinook salmon, and Delta smelt. The assessment of hydroacoustic impact using the National Marine Fisheries Service Pile Driving Calculator shows an additional hydroacoustic impact area across the channel during pile driving of up to 72 feet for a peak sound pressure threshold exceedance and a cumulative sound exposure level exceedance impact area of 9,610 feet with the use of a sound attenuation device.

To address fish passage in the MND/EA, analyze the impact of Project activities specifically 1) an increase in predation on native fish due to the prolonged presence of the cofferdams in the river and 2) the concurrent use of cofferdams and pile driving within the channel) on fish passage. Explain if the combined activities physically and hydroacoustically impede fish passage.

**Comment 4: Mitigation measure revisions needed to mitigate impacts to western pond turtle to less-than-significant**

Western pond turtles have a very broad nesting period (typically April through August) with overwintering of some nests and emergence in March or April. Nests can be established up to 500 meters from the nearest watercourse in sandy substrate with upland grassland characteristics. Pre-construction surveys identify the presence of turtles, but it is not possible to tell where turtle nests are located within hours to days after they are buried.

CDFW recommends that the MND/EA include a measure requiring a qualified biologist to conduct focused surveys for potential western pond turtle nesting habitat (sandy or loose, well-drained soil) on-site prior to each phase of the Project. If nesting habitat is

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identified, to exclude any female western pond turtle from laying eggs on the Project site, exclusion fencing should be placed prior to the egg-laying season (April through August) no later than mid-April. Exclusion fencing should be designed to encompass the nesting habitat impacted during each Project phase and the fencing should be maintained weekly until construction activities have been completed.

Additionally, CDFW recommends the MND be revised to include the following western pond turtle nesting avoidance measure:

*“Western Pond Turtle Exclusion and Avoidance - To avoid Western pond turtle (WPT) nest destruction, exclusion fencing shall be installed around each phase of the Project site and staging areas where Project activity will occur prior to the beginning of the Western pond turtle nesting season and start of construction for each phase of the Project. Installation of exclusion fencing shall be directed by the qualified biologist. Exclusion fencing shall be partially buried by at least six inches below grade and must be maintained for the duration of the Project. If an active turtle nest containing either hatchlings or eggs is found, CDFW shall be consulted to determine and implement the appropriate avoidance measures. This may include a “no disturbance” buffer around the nest site until the hatchlings have moved to a nearby aquatic site.”*

**Comment 5: Mitigation measure revisions needed to mitigate impacts to burrowing owls to less-than-significant**

The burrowing owl is designated by the State of California as a Species of Special Concern, defined as a species with declining population levels, limited ranges, and/or continuing threats which make them vulnerable to extinction (<https://wildlife.ca.gov/Conservation/SSC>). Habitat loss, degradation, and fragmentation are the greatest threats to burrowing owls in California. The Project’s potential impacts are compounded with ongoing impacts to populations within the San Joaquin Valley through the loss of scrub and upland habitats. In addition, because of their need for open habitat with low vegetation, burrowing owls are unlikely to persist in agricultural lands dominated by vineyards and orchards or urbanized lands, which has contributed to the species’ decline. Loss of agricultural and other open lands (such as grazed landscapes) also negatively affect burrowing owl populations. Also, fossorial mammal burrows are important habitat to burrowing owl. Therefore, loss of burrowing owl habitat can be considered a significant impact that warrants mitigation to less-than-significant through the MND/EA.

The Project has the potential to adversely impact the species through permanent loss of nesting and foraging habitat. The Project may also result in additional impact to burrowing owl through nest abandonment, loss of young, reduced health and vigor of chicks (resulting in reduced survival rates), and breeding and foraging behavior disturbance

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through Project activities. Burrowing owls are also known to utilize dormant or infrequently maintained urban infrastructure for nesting habitat. Therefore, the MND/EA should include measures to require annual surveys for burrowing owls throughout each phase or each construction season of the Project to address potential impacts from project phasing or dormancy periods and to provide compensatory mitigation.

1. *Revise Pre-construction Survey Mitigation Measure.* CDFW recommends the MND/EA Mitigation Measure “Conduct Surveys for Western Burrowing Owl and Implement Protective Measures if Found” be revised to include detailed survey protocol requirements that adhere to the mitigation strategies and survey guidelines as defined in CDFW’s 2012 *Staff Report on Burrowing Owl Mitigation* (<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline>).
2. *Compensatory Mitigation.* Mitigation Measure “Conduct Surveys for Western Burrowing Owl and Implement Protective Measures if Found” does not reduce impacts from permanent loss of burrowing owl nesting or foraging habitats to a level of less-than-significant as it does not offset those impacts with compensatory mitigation requirements. To address this, the MND/EA should include a mitigation measure requiring compensatory mitigation for impacts to burrowing owl breeding, foraging and wintering habitat at a minimum of a 3:1 mitigation ratio (conserved habitat to impacted habitat) for permanent impacts and a 1:1 ratio for temporary impacts.

Mitigation lands for owls should have presence of ground squirrel and their burrows, burrow surrogates, well-drained soils, abundant and available prey within close proximity to burrows, as well as foraging habitat. The mitigation areas for burrowing owls should be currently occupied by owls and approved by CDFW prior to the start of Project-related activities.

3. *Passive vs. Active Relocation.* Please be advised that CDFW does not consider exclusion of burrowing owls or “passive relocation” as a “take” avoidance, minimization or mitigation method, and considers exclusion as a significant impact. The long-term demographic consequences of exclusion techniques have not been thoroughly evaluated, and the survival rate of evicted or excluded owls is unknown. All possible avoidance and minimization measures should be considered before temporary or permanent exclusion and closure of burrows is implemented in order to avoid “take”.

While active relocation is not considered “take” avoidance, minimization, or mitigation, if avoiding impacts to burrowing owls is not possible, active relocation of burrowing owls can be performed as a tool in conjunction with mitigation. Active relocation will require a relocation plan that includes owl banding, success criteria,

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long-term monitoring, management, and reporting in order to evaluate the success of this technique and determine the survival rate of relocated owls.

**Comment 5: Mitigation measure revision needed to mitigate impacts to nesting birds to less-than-significant**

CDFW recommends the MND be revised to include the following nesting bird assessment and avoidance measure. The measure pertains to birds except Swainson's hawk, which requires use of a specific survey protocol: *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Tech. Advis. Comm., May 2000).

*"Nesting Bird Assessment and Avoidance - Prior to the initiation of Project activities, including ground disturbing activities scheduled to occur between February 15 and September 15, a qualified biologist shall conduct a habitat assessment and nesting survey for nesting bird species no more than five (5) days prior to the initiation of work. Surveys shall encompass all potential habitats (e.g., grasslands and tree cavities) within 250 feet of the Project site. The qualified biologist conducting the surveys shall be familiar with the breeding behaviors and nest structures for birds known to nest in the Project vicinity. Surveys shall be conducted during periods of peak activity (early morning, dusk) and shall be of sufficient duration to observe movement patterns. Survey results, including a description of timing, duration and methods used, shall be submitted to CDFW for review forty-eight (48) hours prior to the initiation of the Project. If a lapse in Project activity of seven days (7) or more occurs, the survey shall be repeated, and no work shall proceed until the results have been submitted to CDFW.*

*If nesting birds are found, then no work shall be initiated until species-specific nest buffers have been established with written approval from CDFW. The buffer area(s) shall be fenced off from work activities and avoided until the young have fledged, as determined by the qualified biologist. Active nests within or adjacent to the Project site shall be monitored by the qualified biologist daily throughout the duration of Project activities for changes in bird behavior or signs of distress related to Project activities. If nesting birds are showing signs of distress or disruptions to nesting, then that nest shall have the buffer immediately increased by the qualified biologist until no further interruptions to breeding behavior are detectable."*

**Comment 6: Revisions needed to mitigate impacts to Swainson's hawks to a level of less-than-significant**

Swainson's hawks are designated as a State of California Threatened Species and impacts to the species and its habitat is prohibited without meeting certain conditions. The loss and conversion of native grasslands and agricultural lands to urbanization and

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orchard and vineyard agriculture is the primary threat to Swainson's hawk populations throughout California, and about 80 percent of the Central Valley population of Swainson's hawks is located with the Sacramento, San Joaquin, and Yolo counties region. The MND/EA does not mitigate potential impacts to Swainson's hawk (*Buteo swainsoni*) to less-than-significant because the MND/EA lacks an evaluation of impacts to Swainson's hawks. The MND/EA does not reduce impacts from permanent loss of foraging habitats or indirect impacts to nesting hawks from increased construction activity to a level of less-than-significant as it does not offset those impacts with a compensatory mitigation requirement. The Project's potential impacts to this historically denser population is a significant impact that warrants mitigation to less-than-significant through the MND/EA.

1. *Compensatory Mitigation.* To correct this, CDFW recommends the MND/EA be revised to include an impacts analysis that provides an evaluation and discussion of potential impacts of the Project to Swainson's hawks and their habitats according to CDFW's *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (1994). If impacts are identified, CDFW recommends the MND/EA be revised to include adherence to the mitigation strategies defined in the *Staff Report* in addition to adherence to *CDFW's Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (2000)* survey protocol. Any permanent loss of hawk foraging habitat should be appropriately mitigated. CDFW recommends the MND/EA be updated to include a measure requiring compensatory mitigation for impacts to Swainson's hawk nesting and foraging habitat at a minimum of a 3:1 mitigation ratio (conserved habitat to impacted habitat) for permanent impacts and a 1:1 ratio for temporary impacts, as well as language defining the Project's obligation to obtain take coverage through an Incidental Take Permit (ITP) issued by CDFW. Mitigation lands associated with the Project should be of equal or greater value to the habitat that is lost and mitigated by preserving off-site habitat through purchasing Swainson's hawk foraging credits at a CDFW-approved conservation or mitigation bank or by placing a conservation easement over lands providing suitable foraging habitat including funding an endowment for managing the lands for the benefit of Swainson's hawk in perpetuity as well as preparation of a long-term management plan by a qualified land manager.
2. *Swainson's Hawk Nesting Tree Impacts.* The MND/EA states that Swainson's hawks have been observed in flight over the biological study area and the nearest recorded nest site is on the west side of the San Joaquin River between the limits of project disturbance of the new bridge and the removal of the existing bridge. Any trees within the Project area with known Swainson's hawk or other raptor nests, or with historically active nests (i.e., occupied within the last 10 years), should be avoided to the maximum extent practicable. If a known Swainson's hawk nest tree is removed, even during the non-breeding season, the loss of nesting habitat

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should be mitigated. The MND/EA should describe impacts and include clear and effective measures to adequately mitigate for all permanent and temporary impacts to active, historically active, or suitable nesting habitat that cannot be completely avoided. See the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawk (*Buteo swainsoni*) in the Central Valley of California* (CDFW 1994) at <https://www.wildlife.ca.gov/Conservation/Survey-Protocols#377281284-birds>. The MND/EA should include a mitigation measure saying to reduce impacts to less-than-significant for Swainson's hawk nesting habitat if nesting habitat is removed, appropriate credits should be purchased from a CDFW-approved conservation or mitigation bank in the form of nesting credits or by placing a conservation easement over lands providing suitable nesting habitat including funding an endowment for managing the lands for the benefit of Swainson's hawk in perpetuity as well as preparation of a long-term management plan by a qualified land manager. The mitigation ratio should be 3:1 for permanent impacts.

**Comment 7: Revisions needed to mitigate impacts to bats to a level of less-than-significant**

The MND/EA identifies potentially significant impacts to bat species that could occur within Project elements, including western red bat (*Lasiurus blossevillii*) and pallid bat (*Antrozous pallidus*). Western red bat and pallid bat are designated as California Species of Special Concern (SSC), and thus warrant proactive conservation to ensure the populations' persistence. As the Project's potential impacts include possible roost tree removal and Project-related disturbance, such habitat elements found to be in use by bats warrant reduction of impacts to a level of less-than-significant within the MND/EA. The measure requires surveys by a qualified bat biologist to determine if bats are utilizing habitat elements prior to Project activities and avoidance and minimization measures. However, the measure does not define or identify compensatory mitigation in the event impacts to special-status bats cannot be fully avoided if discovered.

To correct this, CDFW recommends the measure be revised to include a statement defining compensatory mitigation in the event impacts to special-status bats or their habitat are not fully avoidable. CDFW recommends the measure be revised to require compensatory mitigation for impacts to special-status bat habitat at a minimum of a 3:1 mitigation ratio (conserved habitat to impacted habitat) for permanent impacts. CDFW also recommends incorporation of man-made bat roost elements within the Project area developed with consultation of the qualified bat biologist and CDFW, and consideration given to bat-preferred tree varieties when developing the vegetation and landscape plans for the Project area.

CDFW also recommends incorporating the following measures into the MND/EA:

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*“Bat Surveys and Mitigation. A qualified bat biologist shall conduct daytime and evening acoustic surveys for bats within 14 days prior to the beginning of Project construction work planned either on or within 50 feet of the bridge. If bats are identified on-site, the biologist shall identify the species, estimated quantity present, roost type, and roost status, but shall avoid disturbing bats during surveys. If foraging bats, active roosts, or other signs of bat activity (i.e. guano, urine staining) are identified on-site, the qualified bat biologist shall flag or mark all roosts and actively used features for avoidance. If complete avoidance is not possible (i.e. roosts within the bridge structures), then the qualified bat biologist shall develop a Bat Mitigation and Monitoring Plan in consultation with CDFW. The Bat Mitigation and Monitoring Plan shall include: i) an assessment of all Project impacts to bats, including noise disturbance during construction; ii) effective avoidance and minimization measures to protect bats; iii) and compensatory mitigation for permanent impacts to bats or their nesting/roosting habitat. Once the Bat Mitigation and Monitoring Plan is implemented, Project activities may commence.”*

*“Maternal Roosts. If a maternal roost site is found after June 1, then it is to be assumed that non-volant (young) bats are present in the roost area. Because the young will not be able to fly away from the disturbance, there shall be no disturbance to their roost site until the young become volant (after August 31). CDFW recommends if a maternal roost site is found after construction activities have begun that a buffer area be established around the maternal roost.”*

**Comment 8: Revisions needed to mitigate impacts to riparian brush rabbits to a level of less-than-significant**

Riparian brush rabbits are designated as a State of California Endangered Species and impacts to the species and its habitat is prohibited without meeting certain conditions. Riparian brush rabbits are endemic to the Central Valley of California and considered the most sensitive mammal in the state (Larsen 1993). The current population is approximately 1% of the historic population, primarily as a result of habitat destruction, fragmentation, and degradation. Approximately 90% of the Central Valley riparian forests have been eliminated. The species is also threatened by modification of riparian habitat through dams, diversions, and flood control activities as well as from rodenticides (Larsen 1993).

Based on the foregoing, Project impacts would potentially substantially restrict the range of riparian brush rabbit.

The following are potential impacts of Project activities on riparian brush rabbit that would be potentially significant. As riparian brush rabbits are restricted to the riparian forest habitats of the Central Valley, Project activities that compromise these habitats may negatively affect the rabbits. Where human habitation occurs, non-native predators

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(e.g., house cats, domestic dogs, black rats) are supported, and riparian brush rabbit populations are not sustainable. The Project site occurs in the midst of growing housing developments, which restrict the rabbits' range and increases the risk of predation by non-native predators.

Vegetation removal for Project activities may impact riparian brush rabbits as they require dense ground cover for breeding (Larsen 1993). Additionally, vegetation clearing can cause habitat loss, fragmentation, and create edge effects that permeate far beyond the Project site (Harris 1988, Murcia 1995). A major issue for riparian brush rabbit is the availability of refugia from floods. Refugia sites must be above the elevation of catastrophic floods and contain wild rose, native and non-native blackberry vines, and/or willows for cover as well as enough forage (forbs and grasses) to sustain concentrations of rabbits for several weeks while floodwaters recede.

Road construction and use can result in mortality for small mammals like brush rabbits, and roads can increase rabbit exposure to predators like coyotes and great-horned owls (Trombulak and Frissell 2000).

Artificial light has been shown to suppress the immune system of some mammals (Bedrosian et al. 2011), and it can cause disruption of normal circadian rhythms. Rabbits often decrease foraging in higher light levels due to higher risk of predation (Gilbert and Boutin 1991).

According to the *Five-Year Review of the Riparian Brush Rabbit* (CDFW 2020), there has never been an attempt to census or estimate the size of the South Delta local populations. However, approximately 238 riparian brush rabbits were trapped in the South Delta 1999-2010 as breeding stock for a captive propagation effort (Constable et al. 2011). Williams et al. (2008) believed populations in the South Delta totaled "at most a few hundred rabbits." The MND/EA states that the nearest record for riparian brush rabbit is 750 feet west of the biological study area along the railroad tracks and that riparian woodland along the east side of the San Joaquin River and the north of the railroad in the biological study area contains suitable habitat for riparian brush rabbit.

The MND/EA states that the habitat is poor quality and it is unknown whether riparian brush rabbit is present. It also states that disturbance to riparian brush rabbits will take place over two years, including visual disturbance, construction-related disturbance, and noise disturbance from equipment and pile driving. There will be a permanent loss of 0.07 acres of dispersal habitat and 0.08 acres of temporary habitat loss. The Project will create a potential barrier to riparian brush rabbit dispersal along the San Joaquin River due to the presence of the new bridge and added noise and activity along the river. It should be noted that even if the habitat is sub-optimal, riparian brush rabbits will use sub-optimal habitat as so little suitable habitat remains. They have been known to utilize stands of pepperweed when no other suitable habitat is available.

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Besides the impact to riparian brush rabbit from bridge construction, the operation of the bridge will also impact the rabbits. Riparian brush rabbit uses the railroad and road bridges to weather high flood events. The railroad bridge in particular is used as a “bunny highway” during flood events. The new location of the proposed bridge may preclude the use of the railroad bridge and use of the new bridge during flood events may cause increased mortality due to vehicle traffic and pedestrian disturbance.

Another consideration is the disturbance of construction noise to riparian brush rabbit. When the ambient noise level is above baseline conditions, the ability to discern predators is reduced. Construction noise and pile driving noise will increase the noise level above baseline conditions and could increase the riparian brush rabbits’ risk of predation.

All effects of habitat modification are synergistic to this small population of riparian brush rabbits. The MND/EA should assume presence of riparian brush rabbit in absence of protocol level surveys and fully mitigate.

To revise the MND/EA to mitigate the impacts of the Project to less-than-significant, mitigation measures should be included in the MND/EA to conduct protocol-level surveys for riparian brush rabbit, avoid and minimize impacts to riparian brush rabbits and their habitat, and if full avoidance is not possible, compensatory mitigation for riparian brush rabbit habitat should be purchased from a CDFW-approved conservation or mitigation bank. Or, a conservation easement should be placed over lands providing suitable breeding and dispersal habitat including funding an endowment for managing the lands for the benefit of riparian brush rabbit in perpetuity as well as preparation of a long-term management plan by a qualified land manager. The mitigation ratio should be 3:1 for permanent impacts and 1:1 for temporary impacts. CDFW suggests purchasing riparian brush rabbit mitigation separately from riparian credits purchased to compensate for impacts to fish and birds. Habitat credits purchased to offset impacts to fish and nesting birds may not be suitable habitat for riparian brush rabbit. Creation of flood refugia can also be considered as mitigation in conjunction with compensatory mitigation. CDFW also recommends inclusion of language defining the Project’s obligation to obtain take coverage for riparian brush rabbit through an ITP issued by CDFW.

## **ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form, online field survey form, and contact information for CNDDDB staff can be found at the following link:

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<https://wildlife.ca.gov/data/CNDDB/submitting-data>. The types of information reported to CNDDB can be found at the following link: <https://wildlife.ca.gov/Data/CNDDB/Plants-and-Animals>.

## FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of CEQA filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish and Game Code, § 711.4; Pub. Resources Code, § 21089).

## CONCLUSION

CDFW appreciates the opportunity to comment on the MND/EA to assist City of Lathrop in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Ms. Andrea Boertien, Environmental Scientist at (209) 234-3449 or [Andrea.Boertien@wildlife.ca.gov](mailto:Andrea.Boertien@wildlife.ca.gov); or Ms. Melissa Farinha, Senior Environmental Scientist (Supervisory), at [Melissa.Farinha@wildlife.ca.gov](mailto:Melissa.Farinha@wildlife.ca.gov).

Sincerely,

DocuSigned by:

  
BE74D4C98C604EA  
Gregg Erickson  
Regional Manager  
Bay Delta Region

cc:

Office of Planning and Research, State Clearinghouse, Sacramento  
Dominic Vitali, California Department of Transportation – [Dominic.Vitali@dot.ca.gov](mailto:Dominic.Vitali@dot.ca.gov)

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