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Subject: 03-3H900 I-80 CORRIDOR IMPROVEMENT PROJECT
REVISED NOTICE OF PREPARATION, SCH NO. 2021060117

Dear Mr. Patwary:

The California Department of Fish and Wildlife (CDFW) received and reviewed the revised Notice of Preparation of an Environmental Impact Report (EIR) from the California Department of Transportation, District 3 (Caltrans) for the I-80 Corridor Improvement Project (Project) in Sacramento, Solano, and Yolo Counties pursuant the California Environmental Quality Act (CEQA) statute and guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish, wildlife, plants, and their habitats. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may need to exercise its own regulatory authority under the Fish and Game Code (Fish & G. 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 & G. Code, §§ 711.7, subd. (a) & 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 provides, as available, biological expertise during public agency environmental

1 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.

review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may 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 & G. 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 & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

The Project consists of proposed improvements on Interstate 80 (I-80) and United States Route 50 (US-50) from Kidwell Road near the eastern Solano County boundary, through Yolo County, to Truxel Road on I-80, and to State Route (SR) 99 on US-50 in Sacramento County. The Project proposes to construct managed lanes on I-80 from Solano/Yolo County line to El Camino Avenue, and on US-50 from the I-80/US-50 separation to Interstate-5 (I-5) in Sacramento County, for a total length of approximately 17 centerline of 34 lane miles. The Project proposes to add auxiliary lanes at eastbound I-80 between Old Davis Road and Richards Boulevard and westbound I-80 between Jefferson Boulevard and Harbor Boulevard. The Project also proposes to widen the roadway to the median or to the outside, cold planing, reconstruction of roadway structural sections, construction of clear recovery zones (CRZ), extension or replacement of existing cross culverts, installation of intelligent transportation system (ITS) components and overhead signs, restriping, potential construction of soundwalls, modification of roadside ditches, bicycle and pedestrian facility improvements, and installation of a new mobility hub/park and ride facility.

The Project description should include the whole action as defined in the CEQA Guidelines § 15378 and should include appropriate detailed exhibits disclosing the Project area including temporary impacted areas such as equipment and material staging areas, spoils areas, adjacent infrastructure development, and access/haul roads if applicable.

The CEQA Guidelines § 15124 require that environmental documents incorporate a full Project description, including reasonably foreseeable future phases of the Project, and require that it contain sufficient information to evaluate and review the Project's potentially significant impacts.

As required by § 15126.6 of the CEQA Guidelines, the EIR should include an appropriate range of reasonable and feasible alternatives that would attain most of the basic Project objectives and avoid or minimize significant impacts to resources under CDFW's jurisdiction.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations presented below to assist Caltrans in adequately identifying and/or mitigating the Project's significant, or potentially significant, impacts on biological resources. The comments and recommendations are also offered to enable CDFW to adequately review and comment on the proposed Project with respect to impacts on biological resources. CDFW recommends that the forthcoming EIR address the following:

Full Project Description of Project Features to Select Preferred Alternative

To fully address the Project's potentially significant impacts to biological resources and disclose adequate information to identify a preferred alternative, the EIR must include a comprehensive comparison analysis of the potentially significant impacts from each alternative. Please include the following information within the EIR, as applicable:

- A full description of the proposed managed lane improvements, pedestrian/bicycle facilities and ITS updates lane expansion areas that include post mile references and map figures to fully illustrate the construction areas of each element for each alternative;
- A full description of the proposed improvements noted in the previous bullet that includes quantities of material to be employed and a detailed description of how the proposed work will be completed, as well as a construction schedule for each proposed alternative;
- A full description of the proposed areas of impact for the Project elements for each alternative described in acres and linear feet, as well as an analysis of the vegetation type and number of trees to be trimmed or removed for each alternative. A table that compares the impacts within each applicable habitat type for each alternative should also be included in the EIR;
- A full description of the proposed locations for staging areas and access routes for each alternative; and
- A preliminary design plan set for each alternative.

Assessment of Biological Resources

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable CDFW staff to adequately review and comment on the Project, the EIR should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. CDFW recommends the EIR specifically include:

1. An assessment of all habitat types located within the Project footprint, and a map that identifies the location of each habitat type. CDFW recommends that floristic, alliance- and/or association-based mapping and assessment be completed following, *The Manual of California Vegetation*, second edition (Sawyer 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the Project. CDFW recommends that the California Natural Diversity Database (CNDDB), as well as previous studies performed in the area, be consulted to assess the potential presence of sensitive species and habitats. A nine United States Geologic Survey (USGS) 7.5-minute quadrangle search is recommended to determine what may occur in the region, larger if the Project area extends past one quad (see *Data Use Guidelines* on the Department webpage www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data). Please review the webpage for information on how to access the database to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the Project. CDFW recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can be obtained and submitted at: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data.

   Please note that CDFW's CNDDB is not exhaustive in terms of the data it houses, nor is it an absence database. CDFW recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the Project site. Other sources for identification of species and habitats near or adjacent to the Project area should include, but may not be limited to, State and federal resource agency lists, California Wildlife Habitat Relationship (CWHR) System, California Native Plant Society (CNPS) Inventory, agency contacts, environmental documents for other projects in the vicinity, academics, and professional or scientific organizations.

3. A complete and recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern and California Fully Protected Species (Fish & G. Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. The EIR should include the results of focused species-specific surveys, completed by a qualified biologist, and be conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable. Species-specific

surveys should be conducted in order to ascertain the presence of species with the potential to be directly, indirectly, on or within a reasonable distance of the Project activities. CDFW recommends Caltrans rely on survey and monitoring protocols and guidelines available at: www.wildlife.ca.gov/Conservation/Survey-Protocols. Alternative survey protocols may be warranted; justification should be provided to substantiate why an alternative protocol is necessary. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Some aspects of the Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought or deluge.

4. A thorough, recent (within the last two years), floristic-based assessment of special-status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see www.wildlife.ca.gov/Conservation/Plants).

5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

The EIR should provide a thorough discussion of the Project's potential direct, indirect, and cumulative impacts on biological resources. To ensure that Project impacts on biological resources are fully analyzed, the following information should be included in the EIR:

1. The EIR should define the threshold of significance for each impact and describe the criteria used to determine whether the impacts are significant (CEQA Guidelines, § 15064, subd. (f)). The EIR must demonstrate that the significant environmental impacts of the Project were adequately investigated and discussed, and it must permit the significant effects of the Project to be considered in the full environmental context.

2. A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by Project activities especially those adjacent to natural areas, exotic and/or invasive species occurrences, and drainages. The EIR should address Project-related changes to drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.

    a. CDFW strongly recommends reducing artificial light outputs within the Project limits to avoid potentially significant impacts from light pollution. Light pollution

has the potential to significantly and adversely affect biological resources, where unlike the natural brightness created by the monthly cycle of the moon, permanent and continuously powered lighting fixtures create an unnatural light regime that produces a constant light output. Continuous light output for 365 days a year can have a cumulatively significant impact on fish and wildlife populations.

Night lighting can disrupt the circadian rhythms of many species. Many wildlife species use photoperiod cues for communication (e.g., bird song; Miller, 2006), determining when to begin foraging (Stone et al. 2009), behavior thermoregulation (Beiswenger, 1977), and migration (Longcore and Rich, 2004). Artificial night lighting has also been found to impact juvenile salmonid overwintering success by delaying the emergence of salmonids from benthic refugia and reducing their ability to feed during the winter (Contor and Griffith, 1995).

CDFW recommends analyzing light source outputs as described below and recommends reducing or removing the number of light sources proposed within the I-80 corridor such as informational signs, bicycle/pedestrian access light sources, and overhead light poles. Reduction in the number of light output sources can be accomplished by increasing the standard spacing between light pole sources within the Project limits and by avoiding light source installation in highly sensitive resource locations, such as within the Yolo Bypass or over the Sacramento River. In addition, utilizing light shielding, light output restrictions, and measures discussed in detail below may reduce the potentially significant impacts created by artificial lighting sources within the state highway system on I-80.

3. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the Project footprint, such as nearby public lands (e.g., National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Conservation or Recovery Plan, or other conserved lands).

4. A cumulative effects analysis developed as described under CEQA Guidelines section 15130. The EIR should discuss the Project's cumulative impacts to natural resources and determine if that contribution would result in a significant impact. The EIR should include a list of present, past, and probable future projects producing related impacts to biological resources or shall include a summary of the projections contained in an adopted local, regional, or statewide plan, that consider conditions contributing to a cumulative effect. The cumulative analysis shall include impact analysis of vegetation and habitat reductions within the area and their potential cumulative effects. Please include all potential direct and indirect Project-related impacts to riparian areas, wetlands, aquatic habitats, sensitive species and/or special-status species, open space, and adjacent

natural habitats in the cumulative effects analysis. The ecological footprint of roads extend beyond its physical footprint due to road mortality, habitat fragmentation, and indirect impacts (Spencer et al, 2010). An analysis of the Project's cumulative contribution to impediments to wildlife movement should consider the effects of road widening, projected increases in traffic volumes, and degradation of wildlife movement corridors and/or wildlife movement areas.

Mitigation Measures for Project Impacts to Biological Resources

The EIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the construction and long-term operation and maintenance of the Project. CDFW also recommends the environmental documentation provide scientifically supported discussions regarding adequate avoidance, minimization, and/or mitigation measures to address the Project's significant impacts upon fish and wildlife and their habitat. For individual projects, mitigation must be roughly proportional to the level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (Guidelines § § 15126.4(a)(4)(B), 15064, 15065, and 16355). In order for mitigation measures to be effective, they must be specific, enforceable, and feasible actions that will improve environmental conditions. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following:

1. *Fully Protected Species*: Several Fully Protected Species (Fish & G. Code § 3511) have the potential to occur within or adjacent to the Project area, including, but not limited to: white-tailed kite (*Elanus leucurus*), ring-tailed cat (*Bassariscus* astutus), and California black rail (*Laterallus jamaicensis coturniculus*). Fully protected species may not be taken or possessed at any time. Project activities described in the EIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends the EIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends Caltrans include in the analysis how appropriate avoidance, minimization and mitigation measures will reduce indirect impacts to fully protected species.

2. *Sensitive Plant Communities*: CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in *The Manual of California Vegetation* (Sawyer, 2009). The EIR should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts.

3. *Mitigation*: CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the EIR

should include mitigation measures for adverse Project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, onsite habitat restoration, enhancement, or permanent protection should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

CDFW recommends all Project facilities (e.g., culverts, bridges, and overpasses) replacement or reconstruction activities be designed to allow for movement of native resident and migratory species that could potentially occur in the area. CDFW recommends Caltrans follow their *Wildlife Crossings Guidance Manual* (Meese, Shilling, and Quinn, 2009), as well as CDFW's *Transportation Planning Companion Plan,* associated with the State Wildlife Action Plan (CDFW, 2016). CDFW recommends that Caltrans identify if any of the Project facilities replacement or reconstruction projects are within state or regional linkage design areas, species core recovery areas or critical habitat, or in locations with high vehicle-animal collisions, and consider measures to incorporate movement of both aquatic and terrestrial species to allow for safe passage over or under the I-80 corridor.

The EIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset Project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

4. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in the regional ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

CDFW recommends that local onsite propagules from the Project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be appropriately timed to ensure the viability of the seeds when planted. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various Project components as appropriate. Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the Project. Examples may include retention of woody material, logs, snags, rocks, and brush piles. Fish and Game Code sections 1002, 1002.5 and 1003 authorize CDFW to issue permits for the take or possession of plants and wildlife for scientific, educational, and propagation purposes. Please see our website for more information on Scientific Collecting Permits at www.wildlife.ca.gov/Licensing/Scientific-Collecting#53949678-regulations-.

5. *Nesting Birds:* Please note that it is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). CDFW implemented the MBTA by adopting the Fish and Game Code section 3513. Fish and Game Code sections 3503, 3503.5 and 3800 provide additional protection to nongame birds, birds of prey, their nests, and eggs. Sections 3503, 3503.5, and 3513 of the Fish and Game Code afford protective measures as follows: section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Fish and Game Code or any regulation made pursuant thereto; section 3503.5 states that is it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by the Fish and Game Code or any regulation adopted pursuant thereto; and section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

   Potential habitat for nesting birds and birds of prey is present within the Project area. The Project should disclose all potential activities that may incur a direct or indirect take to nongame nesting birds within the Project footprint and its vicinity. Appropriate avoidance, minimization, and/or mitigation measures to avoid take must be included in the EIR.

   CDFW recommends the EIR include specific avoidance and minimization measures to ensure that impacts to nesting birds or their nests do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: Project phasing and timing, monitoring of Project-related noise (where

applicable), sound walls, and buffers, where appropriate. The EIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the Project site. In addition to larger, protocol level survey efforts (e.g., Swainson's hawk surveys) and scientific assessments, CDFW recommends a final preconstruction survey be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted earlier.

6. *Moving out of Harm's Way:* The Project is anticipated to result in the clearing of natural habitats that support native species. To avoid direct mortality, Caltrans should state in the EIR that a qualified biologist, with the proper handling permits, will be retained to be onsite prior to and during all ground- and habitat-disturbing activities. Furthermore, the EIR should describe that the qualified biologist may move out of harm's way special-status species or other wildlife that would otherwise be injured or killed from Project-related activities, as needed. The EIR should also describe qualified biologist qualifications and authorities to stop work to prevent direct mortality of special-status species. CDFW recommends fish and wildlife species be allowed to move out of harm's way on their own volition, if possible, and to assist their relocation as a last resort. It should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for habitat loss.

7. *Translocation of Species*: CDFW generally does not support the use of relocation, salvage, and/or transplantation as the sole mitigation for impacts to rare, threatened, or endangered species as these efforts are generally experimental in nature and largely unsuccessful. Therefore, the EIR should describe additional mitigation measures that utilize habitat restoration, conservation, and/or preservation, in addition to avoidance and minimization measures, if it is determined that there may be impacts to rare, threatened, or endangered species.

8. *Light Pollution*: Caltrans should provide Isolux diagrams that analyze current light levels present during pre-Project conditions and provide the predicted Project light levels that will be created upon completion of the Project in the EIR. The proposed analysis should include all potential light sources proposed for new installation or replacement. Upon Project completion Caltrans should conduct a ground survey that compares current and predicated light levels with actual light levels achieved upon completion of the Project through comparison of Isolux diagrams. If an increase from the projected levels to the actual levels is discovered additional avoidance, minimization or mitigation measures may be necessary to reduce the impact to less than significant.

   Additionally, if Caltrans determines the Project will produce an increase in light, CDFW recommends the overall number of changeable message signs (CMSs) and light outputs be reduced to minimize the cumulative impacts of light pollution to sensitive and natural communities within the limits of the project. In general,

the necessity for additional CMSs in the area may not be warranted as most drivers have personal cellular phones and navigation systems in their vehicles updating them on live/current road conditions. Furthermore, CDFW recommends Caltrans analyze the necessity of CMSs (e.g., could safe driving messages be depicted on existing road signs without the need for additional disturbance or light pollution). If the overall number of CMSs is not reduced, minimized, or eliminated from the Project, CDFW recommends Caltrans consider utilizing CMSs, proposed in this Project, to warn drivers of the potential for wildlife crossing the roads and to reduce speeds. If this mitigation strategy is applied, CDFW also recommends Caltrans conduct research into the efficacy of this method in reducing wildlife-vehicle collisions. CDFW is available to consult with Caltrans on the display timing and messaging that would be most appropriate.

The EIR should incorporate mitigation performance standards that would ensure that impacts are reduced to a less-than-significant level. Mitigation measures proposed in the EIR should be made a condition of approval of the Project. Please note that obtaining a permit from CDFW by itself with no other mitigation proposal may constitute mitigation deferral. CEQA Guidelines section 15126.4, subdivision (a)(1)(B) states that formulation of mitigation measures should not be deferred until some future time. To avoid deferring mitigation in this way, the EIR should describe avoidance, minimization and mitigation measures that would be implemented should the impact occur.

California Endangered Species Act

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the CESA. CDFW recommends that a CESA Incidental Take Permit (ITP) be obtained if the Project has the potential to result in "take" (Fish & G. Code § 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of state-listed CESA species, either through construction or over the life of the Project.

State-listed species with the potential to occur in the area include, but are not limited to: Chinook salmon winter-run and spring-run ESUs (*Oncorhynchus tshawytscha*), Delta smelt (*Hypomesus transpacificus*), longfin smelt (*Spirinchus thaleichthys*), Swainson's hawk (*Buteo swainsoni*), least Bell's vireo (*Vireo bellii pusillus*), western yellow-billed cuckoo (*Coccyzus americanus*), tricolored blackbird (*Agelaius tricolor*), and giant garter snake (*Thamnophis gigas*).

The EIR should disclose the potential of the Project to take State-listed species and how the impacts will be avoided, minimized, and mitigated. Please note that mitigation measures that are adequate to reduce impacts to a less-than significant level to meet CEQA requirements may not be enough for the issuance of an ITP. To facilitate the issuance of an ITP, if applicable, CDFW recommends the EIR include measures to minimize and fully mitigate the impacts to any State-listed species the Project has potential to take. CDFW encourages early consultation with staff to determine

appropriate measures to facilitate future permitting processes and to engage with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service to coordinate specific measures if both state- and federally-listed species may be present within the Project vicinity.

Habitat Conservation Plans

Portions of the Project are within the boundaries of the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo Plan) and the Natomas Basin Habitat Conservation Plan (NBHCP). CEQA Guidelines section 15125(d) states that EIRs must discuss any inconsistencies between projects and applicable plans (including habitat conservation plans/natural community conservation plans). Because the Yolo Plan and NBHCP are currently being implemented, the EIR must include a discussion on the consistency of each project alternative with the respective plans and how Caltrans will ensure that implementation of the project alternatives do not impede either plan's ability to meet its biological goals and objectives. Furthermore, CDFW recommends that Caltrans coordinate with the implementing agency/plan operators (Yolo Habitat Conservancy/Yolo County and the Natomas Basin Conservancy) of each respective plan to ensure significant environmental impacts assessed in the EIR are adequately investigated. Particular focus in the EIR's analysis should be directed to:

- Analysis of all Yolo Plan and NBHCP Covered Species,
- Assessment of habitat types identified in the Yolo Plan and NBHCP,
- Identification of applicable Yolo Plan and NBHCP avoidance, minimization, or mitigation measures; and
- Analysis of any impacts to land commitments of the Yolo Plan and NBHCP.

CEQA Guidelines section 15125(e) requires the analysis examine both the existing physical conditions at the time of the NOP and the potential future conditions discussed in the adopted plans.

The Project area includes a portion of the Swainson's Hawk Zone (SHZ), which the NBHCP describes as the area within one mile of the Sacramento River in the Natomas Basin. The SHZ was derived from the high density of Swainson's hawk nests within this area and scientific evidence for the value of the habitat (NBHCP 2003). The NBHCP recognizes the importance of the SHZ to this species and the viability of their plan which resulted in substantial effort from the City of Sacramento and Sutter County to replan development outside of this area. Although Caltrans is not party to the NBHCP, the EIR must consider the Project's 1) biological impact in an ecologically valuable area and 2) the effect that Project development in the SHZ will have on the continued implementation and viability of the NBHCP.

Wildlife Connectivity

Senate Bill 790 (SB-790) and the forthcoming Assembly Bill 2344 both address wildlife connectivity in California and assert authority and responsibility to CDFW and/or local and state transportation agencies to make wildlife connectivity actions by identifying where they are needed, coordinate and implement those actions, and establish compensatory mitigation credits for actions taken. CDFW recommends the EIR include an analysis and inventory where the implementation of wildlife connectivity actions could reduce wildlife-vehicle collisions and genetic isolation or enhance wildlife connectivity. This assessment could be used to guide Caltrans in developing mitigation for the Project and potentially for future projects through the development of advance mitigation projects. Caltrans' Advance Mitigation Program has the potential to use the Regional Conservation Investment Strategy (Fish and G. Code § 1850 et. seq.) as an instrument to establish Mitigation Credit Agreements that may coincide with the goal of both pieces of legislation. Caltrans should keep in mind that SB-790 is not only focused on establishing mitigation credits for improving aquatic or terrestrial habitat connectivity or wildlife migration, but also includes recolonization, and breeding opportunities inhibited by built infrastructure or habitat fragmentation. Wildlife connectivity actions may include, but are not limited to, road overpasses or underpasses solely for use by wildlife. Therefore, CDFW recommends that Caltrans analyze and consider wildlife connectivity actions that can improve conditions for a variety of species including bats, birds, fish species, amphibians, and other aquatic and terrestrial plant and wildlife species.

Fish Passage Analysis Senate Bill 857

Senate Bill 857 (SB-857), which amended Fish and Game Code 5901 and added section 156 to the Streets and Highways Code states in section 156.3, "For any project using state or federal transportation funds programmed after January 1, 2006, [Caltrans] shall insure that, if the project affects a stream crossing on a stream where anadromous fish are, or historically were, found, an assessment of potential barriers to fish passage is done prior to commencing project design. [Caltrans] shall submit the assessment to the [Department of Fish and Wildlife] and add it to the CALFISH database. If any structural barrier to passage exists, remediation of the problem shall be designed into the project by the implementing agency. New projects shall be constructed so that they do not present a barrier to fish passage. When barriers to fish passage are being addressed, plans and projects shall be developed in consultation with the [Department of Fish and Wildlife]."

The Biological Resources section of the EIR should address the following locations noted in the CALFISH Database that occur within the Project limits as it pertains to SB-857.

- Location 1, South Fork Putah Creek (I-80; PM 41.3, Solano County), Fish Passage Assessment Database ID# 761347, fish barrier status: temporal;

- Location 2, Putah Creek (SR-113; PM 22.45, Solano County), Fish Passage Assessment Database ID# 761382, fish barrier status: total barrier;

- Location 3, Putah Creek (I-80; PM 0.01, Solano County), Fish Passage Assessment Database ID# 764518, fish barrier status: total;

- Location 4, Unnamed tributary to Toe Drain (I-80; PM 9.4, Yolo County), Fish Passage Assessment Database ID# 764517, fish barrier status: unassessed; and

- Location 5, Unnamed tributary to Toe Drain (I-80; PM 10.62, Yolo County), Fish Passage Assessment Database ID# 764482, fish barrier status: unassessed.

The EIR should include a fish passage discussion section to address potentially significant impacts. CDFW recommends that the fish passage section, at a minimum, discuss the current status of the crossing locations noted in the California Fish Passage Assessment Database, conduct first pass and or second pass fish assessments, as necessary, as well as provide images of the upstream and downstream ends of water conveyance structures.

Swainson's Hawk

The Project is located within suitable foraging, and suitable nesting habitat for Swainson's hawk, a state threatened species, also protected under Fish and Game Code section 3503, 3503.5 and the federal Migratory Bird Treaty Act (MBTA). CDFW recommends surveys should be conducted according to the Swainson's Hawk Technical Advisory Committee's (TAC) *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline). CDFW strongly recommends the EIR specify that the TAC survey method should be strictly followed by starting early in the nesting season (late March to early April) in order to maximize the likelihood of detecting an active nest. Surveys should be conducted within a minimum 0.25-mile radius of the proposed Project area and should be completed for at least the two survey periods immediately prior to initiating any Project-related construction work. Raptor nests may be very difficult to locate during egg-laying or incubation, or chick brooding periods (late April to early June) if earlier surveys have not been conducted. These full-season surveys may assist with Project planning, development of appropriate avoidance, minimization and mitigation measures, and may help avoid any Project delays. However, CDFW recommends Caltrans perform these surveys during the recommended survey periods for multiple years, in advance of Project initiation, in order to assist Caltrans in accurately evaluating the potential for significant impacts to the species. The areas expanded in this revised NOP should be included in project surveys.

In order to avoid "take" (including nest abandonment), or adverse impacts to Swainson's hawk, in the event an active nest is found during surveys, CDFW recommends Caltrans establish a buffer based on site-specific conditions (e.g., avoid all Project-related disturbance within a minimum of 0.25 miles and up to 0.5 miles if Caltrans or Project-

biologist determine necessary due to site-specific conditions). Please refer to the CDFW guidance document on Swainson's hawk, which is available at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83992&inline, on take avoidance, minimization and mitigation measures. Early consultation with CDFW and other natural resource agencies on Swainson's hawk take avoidance, minimization measures, and mitigation measures are strongly recommended.

Purple Martin

Purple martin (*Progne subis*) are present within the US-50 corridor and the revised Project alignment along where 19th Street/Freeport Boulevard intersects with US-50. This migratory bird species is a California species of special concern and typically nests in vertical weep holes underneath bridges and overpasses within the Sacramento area. Once considered fairly common, habitat loss and competition from an increasing European starling (*Sturnus vulgaris*) population has limited purple martin to primarily nesting in these anthropogenic substrates (Airola, 2003). Additionally, the local population has declined by 87 percent over the last 17 years due to a variety of factors including the reduction of prey species from increased use of neonicotinoids and disturbance to colonies during transportation construction projects (Airola, 2020). Avoidance and minimization measures employed to protect migratory bird species from construction impacts such as noise and vibration commonly include installing exclusionary devices before a species' nesting season begins. Due to the limited nesting substrate available to purple martin and the stresses imposed on local colonies, CDFW recommends the EIR analyze alternative methods of avoidance and minimization. To avoid impacts to purple martin, CDFW recommends timing Project activities near colony sites when purple martin are not present. CDFW recommends that if Project activities are to occur when purple martin are present, all vertical weep holes and nesting substrate that have been utilized by purple martin in the past remain open and un-blocked. Other avoidance and minimization strategies could include a combination of encouraging the use of other elevated road sites, artificial nest structures in unoccupied regions, and timing of high disturbance Project activities outside critical periods in the migratory bird breeding cycle. In addition to allowing purple martin to nest during construction, CDFW recommends that Caltrans require routine monitoring of purple martin populations. Monitoring of purple martins should include annual colony population monitoring at previously documented nest sites at the US-50 overpass and 19th Street/Freeport Boulevard intersection, in addition to adjacent nest sites in Sacramento County, listed below. project impact monitoring, and reproductive success determinations via number of active nests and young fledged. Monitoring should be performed by a qualified biologist capable of determining unusual behaviors and who can evaluate the effectiveness of avoidance and minimization measures.

The EIR should also analyze cumulative impacts to purple martins regarding the US-50 Multimodal Corridor Enhancement and Rehabilitation Project, currently under construction, and the proposed I-5 Corridor Improvement Project (FixSac5). During this analysis, Caltrans should discuss when the Project's incremental effect is cumulatively considerable and examine impacts that are created as a result of the combination of the

project evaluated in the EIR together with other projects that may cause related impacts. There are multiple colonies throughout the Sacramento area that nest in highway overpasses and elevated freeway sections and have been subject to transportation related construction activity during the nesting season (i.e., 35th Street, S Street, 29th and R Streets, and Redding Avenue colonies). This project and the proposed FixSac5 project could further subject local colonies (i.e., 19th Street/Freeport Boulevard and I Street colonies) to continued disturbance during the nesting season. Caltrans District 3 is familiar with the impacts associated with colonies that were disturbed during the US-50 Multimodal Corridor Enhancement and Rehabilitation Project and have coordinated with CDFW and local experts on purple martins in the past. CDFW recommends continued coordination occur for upcoming projects to identify and implement additional conservation efforts for the species that may include monitoring and alternative nest substrates (as mentioned above), environmental training for construction contractors, adding nest guards in weep holes to reduce nestling fallout, and installing perch wires.

Bats

The Yolo Bypass is known to support a large and diverse population of bat species, estimated to be in the hundreds of thousands, that are well documented and acknowledged. The CNDDB has numerous positive findings for pallid bat (*Antrozous pallidus*), hoary bat (*Aeorestes cinereus*), and silver haired bat (*Lasionycteris notivagans*) within the Project limits. The Project also occurs within high quality Brazilian free-tailed bat (*Tadarida brasiliensis*) habitat as noted in the CDFW Biogeographic Information and Observational System (BIOS) data set 2498 (ds2498). This BIOS dataset directly corelates with the existing population of Mexican free-tailed bats (*Tadarisa brasiliensis mexicanus*), a sub-species of the Brazilian free-tailed bat, that is a regionally significant species. The population of Mexican free-tailed bats provide ecological benefits to the region by helping to control insect populations, which in turn may help to prevent crop destruction and benefit public health and safety. The existing population also attracts annual visitors to the Yolo Bypass Wildlife Area (YBWA) for recreational, scientific, and educational purposes. Due to the presence of the species within the Project limits and its value to the region, CDFW recommends Caltrans consider this Project to be of regional or areawide significance (CEQA Guidelines, § 15206). CDFW is committed to working with Caltrans to coordinate mitigation measures into the EIR that will minimize impacts caused by the Project to this biological resource.

In general, the widely accepted knowledge that bats utilize anthropogenic structures, such as bridges and culverts, for day, night, and maternity roosts creates the potential for significant impacts to bats as a result of the Project that should be addressed in the EIR. To evaluate and avoid potentially significant impacts to bat species, CDFW recommends the EIR include avoidance, minimization, and mitigation measures and that Caltrans prepare a bat avoidance and habitat enhancement plan. The bat avoidance plan should: ensure the existing facility, any modifications to the existing facility or new construction of facilities does not preclude bats from roosting within the causeway at the Yolo Bypass before, during and after construction is complete; require

detailed methods of habitat assessments and monitoring well in advance of Project implementation; utilize phased construction strategies and seasonal avoidance developed in coordination with wildlife agencies; and include temporary and permanent bat housing structures. In addition, the plan should also include facets to preserve known roost structures and create additional roost structures in coordination with CDFW.

Bats are considered non-game mammals and are protected by state law from take and/or harassment (Fish and Game Code § 4150, CCR § 251.1). Several bat species are also considered Species of Special Concern, which meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines §15065); therefore, impacts may be considered potentially significant unless adequate mitigation is incorporated. CDFW recommends the following mitigation measures be incorporated in the EIR:

Recommended Mitigation Measure 1 – Bat Habitat Assessment

A qualified bat biologist should conduct a habitat assessment within the Project limits for suitable bat roosting habitat within six months prior to the beginning of Project-related activities. The habitat assessment shall include a visual inspection of features within the work area for potential roosting features including trees, crevices, portholes, expansion joints and hollow areas (bats need not be present). A report should be provided by the qualified bat biologist and incorporated into the EIR that includes a section discussing the locations of suitable bat habitat and if any bats or signs of bats (feces or staining at entry/exit points) are discovered.

Recommended Mitigation Measure 2 – Bat Habitat Monitoring/Surveys

If suitable or occupied habitat is discovered during the assessment, a qualified bat biologist shall conduct focused surveys at habitat features. Methods should include utilizing night-exit surveys, sound analyzation equipment and visual inspection within open expansion joints and portholes of the structures. Surveys should occur from March 1 to April 15 or August 31 to October 15 prior to construction activities. If the focused survey reveals the presence of roosting bats, then the qualified bat biologist will develop a bat avoidance plan to address exclusionary or avoidance measures that will be implemented prior to construction during the period between March 1 to April 15 or August 31 to October 15. Potential avoidance methods may include visual monitoring and staging of work at different ends of the Project to avoid work during critical periods of the bat life cycle or to allow roosting habitat to persist undisturbed throughout the course of construction. Exclusion netting or adhesive roll material shall not be used as exclusion methods. If presence/absence surveys indicate bat occupancy, then construction should be limited to occur when the most vital aspects of the life cycle are not occurring (maternity/pupping season).

Recommended Mitigation Measure 3 – Permanent Bat Roost Design

CDFW recommends inclusion of permanent bat roost structures into the design of any modified or new facilities including but not limited to causeways, bridges, culverts, or overpasses to avoid potentially significant impacts from permanent habitat loss. The bat roost structures should be incorporated as part of the facilities, modified for site-species specific roosting dimensions and made of materials that can last the service life of the facilities (i.e., concrete). The bat roost structures should be designed in coordination with CDFW. The appropriate baffle spacing or features to accommodate multiple species of bats is specified in the *Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions Manual* (Caltrans, 2019).

Native Plant Protection Act

The Native Plant Protection Act (NPPA) (Fish & G. Code §1900 *et seq*.) prohibits the take or possession of state-listed rare and endangered plants, including any part or product thereof, unless authorized by CDFW or in certain limited circumstances. Take of state-listed rare and/or endangered plants due to Project activities may only be permitted through an ITP or other authorization issued by CDFW pursuant to California Code of Regulations, Title 14, section 786.9 subdivision (b).

Lake and Streambed Alteration Program

The EIR should identify all perennial, intermittent, and ephemeral rivers, streams, lakes, other hydrologically connected aquatic features, and any associated biological resources/habitats present within the entire Project footprint (including utilities, access, and staging areas). The EIR should analyze all potential temporary, permanent, direct, indirect and/or cumulative impacts to the above-mentioned features and associated biological resources/habitats that may occur because of the Project. If it is determined the Project will result in significant impacts to these resources the EIR shall propose appropriate avoidance, minimization and/or mitigation measures to reduce impacts to a less-than-significant level.

Section 1602 of the Fish and Game Code requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream, or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream, or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

If CDFW determines that the Project activities may substantially adversely affect an existing fish or wildlife resource, a Lake and Streambed Alteration (LSA) Agreement will be issued which will include reasonable measures necessary to protect the resource. CDFW’s issuance of an LSA Agreement is a “project” subject to CEQA (see Pub.

Resources Code 21065). To facilitate issuance of an LSA Agreement, if one is necessary, the EIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the Project may avoid or reduce impacts to fish and wildlife resources. To submit an LSA Notification package, please go to https://epims.wildlife.ca.gov/index.do.

Please note that other agencies may use specific methods and definitions to determine impacts to areas subject to their authorities. These methods and definitions often do not include all needed information for CDFW to determine the extent of fish and wildlife resources affected by activities subject to Notification under Fish and Game Code section 1602. Therefore, CDFW does not recommend relying solely on methods developed specifically for delineating areas subject to other agencies' jurisdiction (such as United States Army Corps of Engineers) when mapping lakes, streams, wetlands, floodplains, riparian areas, etc. in preparation for submitting a Notification of an LSA.

CDFW relies on the lead agency environmental document analysis when acting as a responsible agency issuing an LSA Agreement. CDFW recommends lead agencies coordinate with us as early as possible, since potential modification of the proposed Project may avoid or reduce impacts to fish and wildlife resources and expedite the issuance of an LSA Agreement.

The following information will be required for the processing of an LSA Notification and CDFW recommends incorporating this information into any forthcoming CEQA document(s) to avoid subsequent documentation and Project delays:

1. Mapping and quantification of lakes, streams, and associated fish and wildlife habitat (e.g., riparian habitat, freshwater wetlands, etc.) that will be temporarily and/or permanently impacted by the Project, including impacts from access and staging areas. Please include an estimate of impact to each habitat type.

2. Discussion of specific avoidance, minimization, and mitigation measures to reduce Project impacts to fish and wildlife resources to a less-than-significant level. Please refer to section 15370 of the CEQA Guidelines.

Section 4(f) De Minimis Determination

A portion of the Project, primarily along the Yolo Causeway, is located within the YBWA, a publicly-owned wildlife area managed by CDFW. The YBWA is managed for many uses and provides a wide variety of benefits for wildlife and the public, which include flood control, wildlife habitat, agriculture, recreation, and educational uses. CDFW also manages grazing leases in vegetation reduction zones of the YBWA. Project activities may have the potential to fiscally harm CDFW and its ability to manage the YBWA if grazing leases are disrupted. Section 4(f) of the Department of Transportation Act of 1966 as amended (Title 49, United States Code § 303) applies to transportation projects

receiving funding or requiring approval from the U.S. Department of Transportation and when 1) the project involves a resource that is protected by the provisions of Section 4(f), and 2) there is a “use” of that resource. The YBWA qualifies as a resource under Section 4(f) as a publicly-owned recreational and wildlife area. If Section 4(f) is triggered, Caltrans should evaluate impacts to the YBWA for each Project alternative and should address noise, vibration, vegetation, wildlife, air quality, and water quality effects. For recreation and wildlife areas, a de minimis impact is one that will not adversely affect the qualities or activities that give the property protection under Section 4(f). CDFW recommends that if Caltrans determines that there are no feasible and prudent avoidance alternatives to use the YBWA, and there is more than one viable alternative to the Project, that Caltrans should identify the alternative with the least overall harm in light of the statute's preservation purpose.

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 (CNDDB). The CNNDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be submitted online or mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov.

FILING FEES

The Project, as proposed, would have an effect on fish and wildlife, and assessment of 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 & G. Code § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

Pursuant to Public Resources Code sections 21092 and 21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the Project. This Project currently spans two CDFW Regions (North Central Region (Region 2) and Bay-Delta Region (Region 3)) and notification to both regions is requested. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670 (R2CEQA@wildlife.ca.gov) and California Department of Fish and Wildlife Bay-Delta Region, 2825 Cordelia Road, Suite 100, Fairfield, CA 94534 (askbdr@wildlife.ca.gov).

CDFW appreciates the opportunity to comment on the revised NOP of the EIR for the I-80 Corridor Improvement Project and recommends that Caltrans address CDFW's comments and concerns in the forthcoming EIR. CDFW personnel are available for consultation regarding biological resources and strategies to minimize impacts and recommend that reoccurring meetings between Caltrans and CDFW occur to discuss Project alternatives, potentially significant impacts, and reasonably feasible avoidance, minimization, and mitigation measures.

If you have any questions regarding the comments provided in this letter or wish to schedule a meeting and/or site visit, please contact Ian Boyd (Region 2) and Robert Stanley (Region 3), Senior Environmental Scientists (Specialists), at (916) 932-3035 and (707) 339-6534 or ian.boyd@wildlife.ca.gov and robert.stanley@wildlife.ca.gov, respectively.

Sincerely,

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