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April 28, 2025

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**Subject: City of Merced Wastewater Collection System Master Plan
Update (Plan)
Recirculated Draft Environmental Impact Report (RDEIR)
SCH: 2018071019**

Dear Ken Elwin:

The California Department of Fish and Wildlife (CDFW) received a Recirculated Draft Environmental Impact Report (RDEIR) from the City of Merced (City) for the Plan pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Plan that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Plan 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 & 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

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.

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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 need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, projects tiered from this Plan may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of a 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.

Unlisted Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State or federal list to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for E, R, or T, as specified in the CEQA Guidelines section 15380, CDFW recommends it be fully considered in the environmental analysis for the Plan.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include sections 3503 (regarding unlawful take, possession, or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession, or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

PLAN DESCRIPTION SUMMARY

Proponent: City of Merced (City)

Objective: The Plan identifies a strategy for the City to meet the long-term sewer system needs of the Vision 2030 General Plan (2030 General Plan) by outlining wastewater infrastructure development to increase the system's average dry weather flow capacity to 27.2 million gallons per day and serve approximately 130,922 equivalent dwelling units. The Plan outlines a general roadmap or programmatic plan, as well as specific projects (capital improvement projects), for developing the City's wastewater collection system to reach reasonable build-out as identified in the 2030 General Plan. The Plan includes six Capital Improvement Projects (CIPs 1-6) for interim and future capacity and North Merced and South Merced Major Improvements and Minor Program Improvements for sewer extensions and the Wastewater Treatment

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Facility (WWTF) Expansion Projects for improving and expanding the existing WWTF. The North Merced and South Merced Major Improvements, Program Minor Improvements, and WWTF Expansion Projects are part of Plan and evaluate the environmental impacts of future projects.

Location: The Plan is located in the City of Merced and is comprised of the 2030 General Plan Specific Urban Development Plan (SUDP)/Sphere of Influence (SOI) areas. Communities such as Celeste, University of California (UC) Merced Campus, and University Community area were considered as well as service to the Bellevue, University, and other community plan areas within the Plan area.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Plan'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 RDEIR prepared for the Plan.

CDFW submitted a comment letter on October 28, 2020 (2020 Letter) for the Plan Draft Environmental Impact Report (DEIR), which provided recommendations identifying and/or mitigating the Plan's significant, or potentially significant, direct and indirect impacts on biological resources (Attachment 1). The RDEIR updates the Plan, and includes updated information service demands based on varying growth projections identified by the 2030 General Plan, and revised biological resource analyses, and biological resource impact and mitigation measure updates.

The RDEIR acknowledges that the Plan area is within the geographic range of several special-status animal species, including species identified in CDFW's 2020 Letter, and proposes specific mitigation measures to reduce impacts to less than significant. CDFW has concerns about the ability of some of the proposed mitigation measures to reduce Plan related potential impacts to less than significant and avoid unauthorized take for several special-status animal species including, but not limited to: the State endangered and fully protected bald eagle (*Haliaeetus leucocephalus*); the State endangered, California rare plant rank (CRPR) 1B.1, and federally threatened Colusa grass (*Neostapfia colusana*); the State endangered, CRPR 1B.1, and federally threatened San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*); the State endangered, CRPR 1B.2, and federally threatened succulent owl's clover (*Castilleja campestris var. succulenta*); the State threatened Swainson's hawk (*Buteo swainsoni*) and tricolored blackbird (*Agelaius tricolor*); the State and federally threatened California tiger salamander – Central California Distinct Population Segment (DPS) (*Ambystoma californiense pop. 1*); the State fully protected golden eagle (*Aquila chrysaetos*); the State candidate western burrowing owl (*Athene cunicularia*) and Crotch's bumble bee (*Bombus crotchii*); the State species of special concern American badger (*Taxidea*

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taxus); the State species of special concern and federally proposed threatened western spadefoot (*Spea hammondi*); the State special animal and federally threatened vernal pool fairy shrimp (*Branchinecta lynchi*); and the State special animal and federally endangered vernal pool tadpole shrimp (*Lepidurus packardii*).

CDFW recommends the following species-specific comments and recommendations be incorporated into the RDEIR and implemented for projects tiered or approved from this Plan.

Swainson's Hawk

The Plan area is within the known geographic range of Swainson's hawk (SWHA) and the RDEIR notes that the species has a high potential to occur. The RDEIR proposes several mitigation measures to mitigate for potential Plan related significant impacts to SWHA including MM BIO-6. MM BIO-6 requires a qualified biologist to conduct SWHA protocol-level surveys within a ½-mile of construction activities, and if an active nest is detected, the measure requires, "...agency consultation to determine specific avoidance and/or compensation measures to sufficiently mitigate the impact." CDFW concurs with MM BIO-6; however, it does not appear that CDFW's 2020 Letter recommendations for SWHA take avoidance and consultation were incorporated in the RDEIR. As such, CDFW recommends the following measures be included for projects tiered or approved from this Plan:

Recommended Mitigation Measure 1: SWHA Avoidance Buffer

If project-specific activities will take place during the SWHA nesting season (i.e., March 1 through September 15), and active SWHA nests are present, CDFW recommends a minimum ½ mile no-disturbance buffer be delineated and maintained around each nest, regardless of whether it was detected by surveys or observed incidentally. These buffers would remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, to prevent nest abandonment and other take of SWHA as a result of project activities.

Recommended Mitigation Measure 2: SWHA Take Authorization

CDFW also recommends that in the event an active SWHA nest is detected, and a ½-mile no-disturbance buffer is not feasible, consultation with CDFW is warranted to discuss how to implement the project and avoid take. If take cannot be avoided, take authorization through the acquisition of an Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

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Tricolored Blackbird

The Plan area is within the known geographic range of tricolored blackbird (TRBL), and the RDEIR notes that the species has a low potential to occur within the Plan area. The RDEIR proposes several mitigation measures to mitigate for potential Plan related significant impacts to TRBL including MM BIO-7. MM BIO-7 requires a preconstruction survey, and if a breeding colony is found within or adjacent to a construction area, the measure states, "...potential avoidance measures available under MM BIO-7 would include establishing a buffer zone, altering the work period to according to their nesting stage, and hazing, which is the deterring or dispersing of wildlife away from a specific location (CDFW 2015)." CDFW concurs with portions of MM BIO-7 but does not recommend the portion of the measure that discusses the potential implementation of hazing a breeding TRBL colony. The implementation of hazing practices would be likely to result in the direct unauthorized take of the species. As such, CDFW reiterates the TRBL comments provided in the 2020 Letter and recommends the following measure be included for projects tiered or approved from this Plan:

Recommended Mitigation Measure 3: TRBL Take Authorization

If a TRBL nesting colony is detected during surveys, consultation with CDFW is warranted to discuss how to implement the project and avoid take, or if avoidance is not feasible, to acquire an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), prior to any ground-disturbing activities.

California Tiger Salamander

The Plan area is within the known geographic range of California tiger salamander (CTS), and the RDEIR notes that the species has a moderate potential to occur within the Plan area. The RDEIR proposes several mitigation measures to mitigate for potential Plan related significant impacts to CTS including MM BIO-4. According to the RDEIR, MM BIO-4 is required to be implemented to minimize impacts to CTS; however, it does not appear that this measure provides any specific survey, avoidance, minimization, or mitigation measures to mitigate for potential significant impacts to this species (i.e., MM BIO-4 appears to only include the title of the measure and no details on what the measure requires). As it does not appear that CDFW's 2020 Letter recommendations for CTS surveys, take avoidance, and consultation were incorporated in the RDEIR, CDFW recommends projects tiered from or approved by this Plan conduct a habitat assessment to identify potentially suitable CTS breeding and upland habitat and, if potential habitat has been identified, CDFW recommends the following:

Recommended Mitigation Measure 4: CTS Protocol-Level Surveys

CDFW recommends that a qualified biologist conduct protocol-level surveys in areas of suitable CTS habitat in accordance with the USFWS "Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of

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the California Tiger Salamander” (USFWS 2003) at the appropriate time of year to determine the existence and extent of CTS breeding and refugia habitat. The protocol-level surveys for CTS require more than one survey season and are dependent upon sufficient rainfall to complete. As a result, consultation with CDFW and the USFWS is recommended well in advance of beginning the surveys and prior to any planned vegetation- or ground-disturbing activities. CDFW advises that the protocol-level survey include a 100-foot buffer around the project site(s) in all areas of wetland and upland habitat that could support CTS. Please be advised that protocol-level survey results are viable for two years after the results are reviewed by CDFW.

Recommended Mitigation Measure 5: CTS Avoidance Buffers

If CTS protocol-level surveys are not conducted, CDFW advises that a minimum 50-foot no-disturbance buffer be delineated around all small mammal burrows in suitable upland refugia habitat within and/or adjacent to the project site(s). Further, CDFW recommends potential or known breeding habitat within and/or adjacent to the project site(s) be delineated with a minimum 250-foot no-disturbance buffer. Both upland burrow and wetland breeding no-disturbance buffers are intended to minimize impacts to CTS habitat and avoid take of individuals. Alternatively, the applicant can assume presence of CTS within the project site(s) and obtain from CDFW an ITP, in accordance with Fish and Game Code section 2081 subdivision (b).

Recommended Mitigation Measure 6: CTS Take Authorization

If through surveys it is determined that CTS are occupying or have the potential to occupy the project site(s), consultation with CDFW is warranted to determine if the project can avoid take. If take cannot be avoided, take authorization would be warranted prior to initiating ground-disturbing activities to comply with CESA. Take authorization would occur through issuance of an ITP by CDFW, pursuant to Fish and Game Code section 2081 subdivision (b), prior to any ground-disturbing activities.

Fully Protected Raptors

The Plan area is within the known geographic range of bald eagle (BAEA) and golden eagle (GOEA); however, the RDEIR notes that BAEA has a very low to nonexistent potential to occur within the Plan area due to no suitable habitat and does not appear to address GOEA anywhere in the document. CDFW doesn't concur that BAEA has a low to nonexistent potential to occur within the Plan area. Additionally, GOEA should have been included within the biological resource analysis in the RDEIR. The northern section of the Plan area is immediately adjacent to an abundant water source at Yosemite Lake with large perching trees overseeing available foraging habitat suitable for BAEA. Further, the RDEIR acknowledges a historical BAEA occurrence was

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documented within the Plan area at Yosemite Lake northeast of the Program Study Area. Additionally, GOEA are known to inhabit open areas with large trees for nesting, and these habitat features are present throughout the Plan area. As the RDEIR didn't provide mitigation measures for BAEA and GOEA, CDFW recommends projects tiered from or approved by this Plan conduct a habitat assessment to identify potentially suitable BAEA and GOEA breeding, nesting, and foraging habitat and, if potential habitat has been identified, CDFW recommends the following:

Recommended Mitigation Measure 7: BAEA Surveys and GOEA Surveys

CDFW recommends that focused BAEA surveys follow the Bald Eagle Breeding Survey Instructions (CDFW 2010) and GOEA surveys use the Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations guidelines (Pagel et al. 2010) and be conducted by qualified biologists prior to project implementation.

Recommended Mitigation Measure 8: BAEA and GOEA Avoidance Buffer

If a BAEA or GOEA are found prior to, or during construction, CDFW recommends implementation of a minimum ½-mile no-disturbance buffer. CDFW advises that this buffer remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged and are no longer reliant upon parental care for survival. In the event that a BAEA or GOEA is detected during surveys, and a ½-mile no-disturbance buffer is not feasible, consultation with CDFW is recommended.

Western Burrowing Owl

The California Fish and Game Commission (FGC) approved BUOW as a candidate for potential listing as a protected species under CESA on October 10, 2024, and published these findings in the California Regulatory Notice Register (Notice Register) on October 25, 2024. As such, BUOW is now a candidate under CESA and receives the same legal protection afforded to an endangered or threatened species (Fish & G. Code, §§ 2074.2 & 2085).

The Plan area is within the known geographic range of western burrowing owl (BUOW), and the RDEIR notes that the species has a high potential to occur within the Plan area. The RDEIR proposes several mitigation measures to mitigate for potential Plan related significant impacts to BUOW including MM BIO-5. MM BIO-5 requires a nesting habitat assessment within 150 meters of project activity, and if BUOW presence is observed, the measure states, "CDFW guidance shall be followed to incorporate the general conservation goals and principals prescribed for developing effective mitigation for the burrowing owl impacts (CDFG 2012)." CDFW concurs with these measures and notes that the Staff Report on Burrowing Owl Mitigation (2012 Staff Report) (CDFG 2012) necessitates multiple surveys prior to the initiation of construction. species. Additionally,

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CDFW recommends the following measures be included for projects tiered or approved from this Plan:

Recommended Mitigation Measure 9: BUOW Avoidance Buffer

Should a BUOW or known BUOW den (active or inactive) be detected, either during preconstruction surveys or construction activities, CDFW recommends that no-disturbance buffers, as outlined in the Staff Report and copied below, be implemented prior to and during any ground-disturbing activities. CDFW also recommends that these buffers be implemented for both wintering and breeding BUOW.

Location*	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting sites	April 1-Aug 15	200 m**	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

* Buffers should be implemented for both wintering and breeding BUOW.

** meters (m)

Recommended Mitigation Measure 10: BUOW Take Authorization

If a BUOW or known BUOW den (active or inactive) is detected, and the no-disturbance buffers outlined in the Staff Report are not feasible, consultation with CDFW is warranted to discuss how to implement the project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

Crotch’s Bumble Bee

The Plan area is within the geographic range of Crotch’s bumble bee (CBB). CBB are known to inhabit areas of grasslands and scrub that contain requisite habitat elements for nesting, such as small mammal burrows and bunch/thatched grasses, and these habitat features are present within the Plan area. As the RDEIR did not analyze potential impacts to CBB and did not include mitigation measures to mitigate for potential significant impacts, CDFW recommends the following measures be included for projects tiered or approved from this Plan:

Recommended Mitigation Measure 11: CBB Habitat Assessment

For future specific projects tiered or approved from the Plan, CDFW recommends a qualified biologist conduct a habitat assessment to determine if the project site(s) and immediate surrounding vicinity contain habitat suitable to support CBB. Potential nesting sites, which include all small mammal burrows, perennial bunch grasses, thatched annual grasses, brush piles, old bird nests, dead trees, and hollow logs would need to be documented as part of the assessment.

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Recommended Mitigation Measure 12: CBB Surveys

If potentially suitable habitat is identified, regardless of what time of year project activities will be conducted, CDFW recommends that a qualified biologist conduct focused surveys for CBB and their requisite habitat features following the methodology outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023).

Recommended Mitigation Measure 13: CBB Avoidance Buffers

If CBB is detected, CDFW recommends that all small mammal burrows and thatched/bunch grasses be avoided by a minimum of 50 feet to avoid take and potentially significant impacts. If ground-disturbing activities will occur during the overwintering period (October through February), consultation with CDFW is warranted to discuss how to implement project activities and avoid take. Any detection of CBB prior to or during project implementation warrants consultation with CDFW to discuss how to avoid take.

Recommended Mitigation Measure 14: CBB Take Authorization

If take cannot be avoided, CDFW recommends acquiring an ITP pursuant to Fish and Game Code Section 2081(b), prior to initiating ground-disturbing activities.

American Badger

The Plan area is within the known geographic range of American badger (AMBA). AMBA occupy sparsely vegetated land cover with dry, friable soils to excavate dens, which they use for cover, and that support fossorial rodent prey populations (i.e., ground squirrels, pocket gophers, etc.) (Zeiner et. al 1990). These habitat features are present within the Plan area, and there is a historical occurrence documented within 6 ½ miles of the Plan area (CDFW 2025). As the RDEIR did not analyze potential impacts to AMBA and did not include mitigation measures to mitigate for potential significant impacts, CDFW recommends the following measures be included for projects tiered or approved from this Plan:

Recommended Mitigation Measure 15: AMBA Focused Surveys

CDFW recommends that a qualified biologist conduct focused surveys for AMBA, as well as their requisite habitat features, to evaluate potential impacts resulting from ground disturbance.

Recommended Mitigation Measure 16: AMBA Avoidance Buffer

Avoidance whenever possible is encouraged via delineation of a 50-foot no disturbance buffer around burrows. CDFW also advises that any individuals observed be allowed to leave the project site(s) of their own volition.

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Western Spadefoot

The Plan area is within the known geographic range of western spadefoot (WESP), and the RDEIR notes that the species has a low potential to occur within the Plan area due to limited suitable habitat. CDFW does not concur that WESP has a low potential to occur within the Plan area as WESP habitat includes grassland and vernal pool habitats essential for breeding and egg-laying, and these habitats are present in the Plan area. The RDEIR documents two known occurrences of WESP within the Plan area, with the closest occurrence located within 3 miles of the Plan area (CDFW 2025), and aerial imagery documents depressional features serving as potential habitat adjacent to Fahrens Creek. As the RDEIR did not include mitigation measures to mitigate for potential significant impacts to WESP, CDFW recommends the following measures be included for projects tiered or approved from this Plan:

Recommended Mitigation Measure 17: WESP Focused Surveys

CDFW recommends that a qualified biologist conduct focused surveys for WESP in areas of suitable habitat, as well as their requisite habitat features, to evaluate potential impacts resulting from ground disturbance within the project site(s).

Recommended Mitigation Measure 18: WESP Avoidance Buffer

If burrows, cracks, loose soil areas or other refugia are found to be used by WESP during focused surveys, avoidance whenever possible is encouraged via delineation and observance of a 50-foot no-disturbance buffer around these resources. If WESP are observed on the project site(s), it is recommended that project activities in their immediate vicinity cease, allowing individuals to leave the site on their own accord.

Branchiopods

The Plan area is within the geographic range of vernal pool fairy shrimp (VPFS) and vernal pool tadpole shrimp (VPTS), and the RDEIR states these species have a very low to nonexistent potential to occur in the Plan area due to limited to no suitable habitat. CDFW does not concur that VPFS and VPTS have low to nonexistent potential to occur within the Plan area as VPFS and VPTS habitat includes ephemeral freshwater, vernal pools, vernal swales, and seasonal wetlands, and these habitats are present within the Plan area. The RDEIR documents multiple known VPFS and VPTS occurrences within the Plan area and aerial imagery documents depressional features serving as potential habitat adjacent to Fahrens Creek with VPFS historical occurrences documented within the vicinity (CDFW 2025). As the RDEIR did not include mitigation measures to mitigate for potential significant impacts to VPFS and VPTS, CDFW recommends projects tiered from or approved by this Plan conduct a habitat assessment to identify potentially suitable VPFS and VPTS breeding and upland habitat and, if potential habitat has been identified, CDFW recommends the following:

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Recommended Mitigation Measure 19: Branchiopod Surveys and Consultation

CDFW recommends that a qualified biologist conduct protocol level surveys in accordance with the USFWS “Survey Guidelines for the Listed Large Branchiopods” (USFWS 2017) the survey season prior to construction. These surveys should be conducted at the appropriate time of year to determine the existence and extent of branchiopods. If through surveys it is determined that branchiopods are occupying or have the potential to occupy a project site(s), coordination with CDFW is recommended well in advance of any planned vegetation- or ground-disturbing activities to determine appropriate avoidance and minimization measures including adequate implementation of no-disturbance buffers. Additionally, consultation with USFWS may be necessary to minimize the potential for federal “take” and/or mitigate for potential impacts.

Special-Status Plants

The Plan area is within the known geographic range of several special-status plant species including succulent owl’s clover, Colusa grass, and San Joaquin Valley orcutt grass, and historical occurrences have been documented for all three species in the Plan area (CDFW 2025). The RDEIR provides measures to mitigate for potential Plan related significant impacts including MM BIO-1. MM BIO-1 requires a preconstruction survey in accordance with CDFW survey protocols and avoidance or relocation of previously unidentified special-status plant species. CDFW concurs with the portion MM BIO-1 that discusses the need for preconstruction surveys and avoidance, but recommends the following measures be included for projects tiered or approved from this Plan prior to the relocation or removal of any special-status plant:

Recommended Mitigation Measure 20: Special-Status Plant Consultation and Take Authorization

If special-status plants are documented during special-status plant surveys, and buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures. If State endangered, threatened, or rare plants are identified during special-status plant surveys, consultation with CDFW is recommended. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081, subdivision (b) and/or California Code of Regulations, Title 14, section 786.9, subdivision (b) is necessary to comply with CESA.

Editorial Comments and/or Suggestions

Invasive Species: MM BIO-3 would require the City to reduce the potential introduction or spread of invasive noxious weeds by requiring Best Management Practices (BMPs) during construction to appropriately clean and inspect construction equipment brought in from other regions. CDFW recommends that this mitigation measure apply to all

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construction equipment before entering any future specific project staging and storage areas as well, as these locations could be located near sensitive biological habitats. This measure should also extend to workers' boots, gloves and tools entering future specific project site(s).

Nesting Birds: CDFW encourages that future project ground-disturbing activities occur during the bird non-nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the nesting season (February 1st through September 15th), the Plan applicant is responsible for ensuring that implementation of the Plan does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Code sections as referenced above.

To evaluate future project-related impacts on nesting birds CDFW recommends that a qualified biologist conduct a preconstruction survey for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the project site(s) to identify nests and determine their status. A sufficient area means any area potentially affected, either directly or indirectly, by the project. In addition to direct impacts (i.e., nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. CDFW recommends that a qualified biologist establish a behavioral baseline of all identified nests. Once project activities begin, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is a compelling biological or ecological reason to do so, such as when the project site(s) would be concealed from a nest site by topography. CDFW recommends that a qualified biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

Federally Listed Species: CDFW recommends consulting with USFWS regarding potential impacts to federally listed species including, but not limited to, CTS, Colusa grass, San Joaquin Valley Orcutt grass, succulent owl's clover, western spadefoot, VPFS and VPTS. The federal Endangered Species Act (ESA) is more broadly defined than CESA; take under the ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with

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essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with the ESA is advised well in advance of any Plan activities.

CNDDDB Positive Submission of Data: Please note that the California Natural Diversity Database (CNDDDB) is populated by and records voluntary submissions of species detections. As a result, species may be present in locations not depicted in the CNDDDB but where there is suitable habitat and features capable of supporting species. A lack of an occurrence record in the CNDDDB does not mean a species is not present. In order to adequately assess any potential Plan related impacts to biological resources, surveys conducted by a qualified wildlife biologist/botanist during the appropriate survey period(s) and using the appropriate protocol survey methodology are warranted in order to determine whether or not any special-status species are present at or near a project site(s).

Lake and Streambed Alteration: The Plan area includes several streams including Fahrens Creek and Bear Creek. MM BIO-11 states the City may obtain a Lake or Streambed Alteration Agreement (LSAA) for the Plan, CDFW concurs with MM BIO-11 and notes that future project activities that substantially change the bed, bank, and channel of any river, stream, or lake are subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent as well as those that are perennial and may include those that are highly modified such as canals and retention basins.

CDFW is required to comply with CEQA in the issuance of a LSAA; therefore, if the CEQA document approved for the Plan does not adequately describe the Plan and its impacts to lakes or streams, a subsequent CEQA analysis may be necessary for LSAA issuance. For information on notification requirements, please refer to CDFW's website (<https://wildlife.ca.gov/Conservation/LSA>) or contact CDFW staff in the Central Region Lake and Streambed Alteration Program at (559) 243-4593.

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

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communities detected during the Plan or tiered project surveys to the CNDDDB. The CNDDDB field survey form can be filled out and submitted online at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

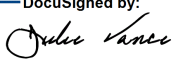
FILING FEES

The Plan, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document 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 environmental document filing 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

CDFW appreciates the opportunity to comment on the RDEIR to assist the City in identifying and mitigating Plan impacts on biological resources. A Mitigation and Monitoring Program (MMRP) (Attachment 2) is included to assist the City with incorporating the recommended mitigation measures provided above. More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). Questions regarding this letter or further coordination should be directed to John Riedel, Environmental Scientist, at (559) 807-1453 or john.riedel@wildlife.ca.gov.

Sincerely,

DocuSigned by:

FA83F09FE08945A...

Julie A. Vance
Regional Manager

ATTACHMENTS

ec: State Clearinghouse
Governor's Office of Planning and Research
State.Clearinghouse@opr.ca.gov

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Matt Nelson
U.S. Fish and Wildlife Service
matthew_nelson@fws.gov

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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



October 28, 2020

Ken Elwin, City of Merced Public Works Director
City of Merced
1776 Grogan Avenue
Merced, California 95341

**Subject: City of Merced Wastewater Collection System Master Plan (Project)
Draft Environmental Impact Report (DEIR)
SCH No. 2018071019**

Dear Mr. Elwin:

The California Department of Fish and Wildlife (CDFW) received a DEIR from the City of Merced for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

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, CDFW appreciates 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 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 & 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 is charged by law to provide, as available, biological expertise during public

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.

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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 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.), related authorization as provided by the Fish and Game Code will be required.

Water Pollution: Pursuant to Fish and Game Code section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. It is possible that without appropriate mitigation measures, implementation of the Project could result in pollution of Waters of the State from storm water runoff or construction-related erosion. Potential impacts to the wildlife resources that utilize these watercourses include the following: increased sediment input from road or structure runoff; toxic runoff associated with development activities and implementation; and/or impairment of wildlife movement along riparian corridors. The Regional Water Quality Control Board and United States Army Corps of Engineers also have jurisdiction regarding discharge and pollution to Waters of the State.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

In this role, CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (e.g., CEQA), focusing specifically on Project activities that have the potential to adversely affect fish and wildlife resources. CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

PROJECT DESCRIPTION SUMMARY

Proponent: City of Merced

Objective: Development of the Wastewater Collection System Master Plan has been an iterative process from 2002 to 2017 to evaluate and assess function, expansion, and

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replacement of the wastewater collection system within the City of Merced to accommodate existing and future development. Wastewater generated within the city is collected in a series of pipelines which the city owns, operates, and maintains. The system includes over 400 miles of gravity sewers which collect wastewater from a majority of residential users, as well as, commercial users, industrial users, and public uses. The Project involves the following types of activities: existing collection system upgrades, new trunk sewer infrastructure (i.e. the proposed northern and southern trunk gravity pipelines), new localized collector infrastructure, existing Wastewater Treatment and Reclamation Facility (WWTRF) expansion, increased WWTRF effluent disposal, and operations and maintenance.

Location: The Project location includes the boundaries of the City of Merced in Merced County.

Timeframe: N/A

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the City of Merced 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.

There are many special-status resources that may be impacted as a result of Project implementation, and these resources may need to be evaluated and addressed prior to any approvals that would allow ground-disturbing activities. CDFW is concerned regarding potential impacts to special-status species including, but not limited to, the State threatened Swainson's hawk (*Buteo swainsoni*), the State endangered and fully protected bald eagle (*Haliaeetus leucocephalus*), the State threatened California tiger salamander (*Ambystoma californiense*), the State threatened tricolor blackbird (*Agelaius tricolor*), the State endangered and federally threatened succulent owl's-clover (*Castilleja campestris* var. *succulenta*), the State endangered and federally threatened Colusa grass (*Neostapfia colusana*), the State endangered and federally threatened San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*), and the State species of special concern burrowing owl (*Athene cunicularia*).

I. Environmental Setting and Related Impact

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or the United States Fish and Wildlife Service (USFWS)?

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COMMENT 1: Swainson's Hawk (SWHA)

Issue: SWHA have the potential to nest near and forage within the Project site. The proposed Project will involve activities near large trees that may serve as potential nest sites.

Specific impacts: Without appropriate avoidance and minimization measures for SWHA, potential significant impacts that may result from Project activities include: nest abandonment, loss of nest trees, loss of foraging habitat that would reduce nesting success (loss or reduced health or vigor of eggs or young), and direct mortality. Any take of SWHA without appropriate incidental take authorization would be a violation of Fish and Game Code.

Evidence impact is potentially significant: SWHA exhibit high nest-site fidelity year after year and lack of suitable nesting habitat in the San Joaquin Valley limits their local distribution and abundance (CDFW 2016). Approval of the Project will lead to subsequent ground-disturbing activities that involve noise, groundwork, and movement of workers that could affect nests and has the potential to result in nest abandonment, significantly impacting local nesting SWHA.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to SWHA associated with the Project, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 1: SWHA Surveys

CDFW agrees with Mitigation Measure BIO-5 of the DEIR, which is consistent with the Swainson's Hawk Technical Advisory Committee (SWHA TAC 2000), that surveys shall be conducted within 0.5 miles of all Program activities. The SWHA TAC recommends a 0.5-mile survey distance from the limits of disturbance. The survey protocol includes early season surveys to assist the project proponent in implementing necessary avoidance and minimization measures, and in identifying active nest sites prior to initiating ground-disturbing activities.

Recommended Mitigation Measure 2: SWHA No-disturbance Buffer

If ground-disturbing activities are to take place during the normal bird breeding season (March 1 through September 15), CDFW recommends that additional pre-activity surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of Project implementation to ensure that no SWHA have begun nesting activities near the Project site. CDFW recommends a minimum no-disturbance buffer of 0.5-mile be delineated around active nests until the

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breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

Recommended Mitigation Measure 3: SWHA Take Authorization

CDFW recommends that in the event an active SWHA nest is detected during surveys and a 0.5-mile no-disturbance buffer is not feasible, consultation with CDFW is warranted to discuss how to implement the project and avoid take. If take cannot be avoided, take authorization through the issuance of an Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

Recommended Mitigation Measure 4: SWHA Nest Trees

CDFW recommends that the removal of known raptor nest trees, even outside of the nesting season, be replaced with an appropriate native tree species planting at a ratio of 3:1 at or near the Project site or in another area that will be protected in perpetuity to reduce impacts resulting from the loss of nesting habitat.

COMMENT 2: California Tiger Salamander (CTS)

Issue: The northern portion of the Project site (i.e. the new northern trunk gravity pipeline) traverses through potential upland CTS habitat and is adjacent to breeding habitat. Given the presence of potential habitat within and near the Project site, ground-disturbing activities have the potential to significantly impact local populations of CTS.

Specific Impacts: Potential ground- and vegetation-disturbing activities associated with Project activities include: collapse of small mammal burrows, inadvertent entrapment, loss of upland refugia, water quality impacts to breeding sites, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

Evidence impact would be significant: Up to 75% of historic CTS habitat has been lost to urban and agricultural development (Searcy et al. 2013). Loss, degradation, and fragmentation of habitat are the primary threats to CTS in both the Central and San Joaquin valleys. Contaminants and vehicle strikes are also sources of mortality for the species (CDFW 2015a, USFWS 2017). The Project site is within the range of CTS and has suitable habitat (i.e., grasslands interspersed with burrows and vernal pools). CTS have been determined to be physiologically capable of dispersing up to approximately 1.5 miles from seasonally flooded wetlands (Searcy and Shaffer 2011) and have been documented to occur near the Project site (CDFW 2020).

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Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to CTS, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 5: Focused CTS Protocol-level Surveys

CDFW recommends that a qualified biologist conduct protocol-level surveys in accordance with the USFWS “Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander” (USFWS 2003) at the appropriate time of year to determine the existence and extent of CTS breeding and refugia habitat. The protocol-level surveys for CTS require more than one survey season and are dependent upon sufficient rainfall to complete. As a result, consultation with CDFW and the USFWS is recommended well in advance of beginning the surveys and prior to any planned vegetation- or ground-disturbing activities. CDFW advises that the protocol-level survey include a 100-foot buffer around the Project area in all areas of wetland and upland habitat that could support CTS. Please be advised that protocol-level survey results are viable for two years after the results are reviewed by CDFW.

Recommended Mitigation Measure 6: CTS Avoidance

If CTS protocol-level surveys as described in the above Mitigation Measure 5 are not conducted, CDFW advises that a minimum 50-foot no-disturbance buffer be delineated around all small mammal burrows in suitable upland refugia habitat within and/or adjacent to the Project site. Further, CDFW recommends potential or known breeding habitat within and/or adjacent to the Project site be delineated with a minimum 250-foot no-disturbance buffer. Both upland burrow and wetland breeding no-disturbance buffers are intended to minimize impacts to CTS habitat and avoid take of individuals. Alternatively, the applicant can assume presence of CTS within the Project site and obtain from CDFW a State ITP in accordance with Fish and Game Code section 2081 subdivision (b).

Recommended Mitigation Measure 7: CTS Take Authorization

If through surveys it is determined that CTS are occupying or have the potential to occupy the Project site, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization would be warranted prior to initiating ground-disturbing activities to comply with CESA. Take authorization would occur through issuance of an ITP by CDFW, pursuant to Fish and Game Code section 2081 subdivision (b). As stated above, in the absence of

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protocol surveys, the applicant can assume presence of CTS within the Project site and obtain an ITP from CDFW.

COMMENT 3: Tricolored blackbird (TRBL)

Issue: TRBL are known to occur in the vicinity of the Project site (CDFW 2020). Review of aerial imagery indicates that the Project site route through agricultural fields that may support nesting TRBL colonies. Flood-irrigated agricultural land, including silage fields, is an increasingly important nesting habitat type for TRBL, particularly in the San Joaquin Valley (Meese, 2014).

Specific impact: Without appropriate avoidance and minimization measures for TRBL, potential significant impacts associated with the Project include nest and/or colony abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

Evidence impact would be significant: As mentioned above, flood-irrigated agricultural land, including silage fields associated with dairies, is an increasingly important nesting habitat type for TRBL, particularly in the San Joaquin Valley (Meese et al. 2014). This potential nesting substrate is present adjacent to the Project area. TRBL aggregate and nest colonially, forming colonies of up to 100,000 nests (Meese et al. 2014). Approximately 86% of the global population is found in the San Joaquin Valley (Kelsey 2008, Weintraub et al. 2016). Increasingly, TRBL are forming larger colonies that contain progressively larger proportions of the species' total population (Kelsey 2008). In 2008, for example, 55% of the species' global population nested in only two colonies, which were located in silage fields (Kelsey 2008). In 2017, approximately 5,800 TRBL were distributed among only two colonies in Fresno County (Meese 2017). Nesting can occur synchronously, with all eggs laid within one week (Orians 1961). For these reasons, depending on timing, disturbance to nesting colonies can cause abandonment, significantly impacting TRBL populations (Meese et al. 2014).

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to TRBL, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 8: TRBL Surveys

CDFW recommends that construction be timed to avoid the normal bird breeding season (February 1 through September 15). However, if construction must take place during that time, CDFW recommends that a qualified wildlife biologist conduct

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surveys for nesting TRBL no more than 10 days prior to the start of implementation to evaluate presence/absence of TRBL nesting colonies in proximity to Project activities and to evaluate potential Project-related impacts.

Recommended Mitigation Measure 9: TRBL Avoidance

If an active TRBL nesting colony is found during preconstruction surveys, CDFW recommends implementation of a minimum 300-foot no-disturbance buffer in accordance with CDFW's "*Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015*" (CDFW 2015b). CDFW advises that this buffer remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged, and are no longer reliant upon the colony or parental care for survival. It is important to note that TRBL colonies can expand over time and for this reason the colony should be reassessed to determine the extent of the breeding colony within 10 days of Project initiation.

Recommended Mitigation Measure 10: TRBL Take Avoidance

In the event that a TRBL nesting colony is detected during surveys, consultation with CDFW is warranted to discuss how to implement the project and avoid take, or if avoidance is not feasible, to acquire an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), prior to any ground-disturbing activities.

COMMENT 4: Bald Eagle

Issue: The State endangered and fully protected bald eagle have the potential to nest and/or forage in the vicinity of the Project site (CDFW 2020). Without appropriate mitigation measures, Project activities conducted within occupied territories have the potential to significantly impact this species.

Specific Impacts: Potentially significant impacts that may result from Project activities include nest abandonment, loss of nest trees, and/or loss of foraging habitat that would reduce nesting success (loss or reduced health or vigor of eggs or young), and direct mortality.

Evidence impact would be significant: The Project will involve noise, groundwork, and movement of workers that may occur directly adjacent to large trees and other features that may potentially serve as nest sites.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to this State endangered and fully protected species, CDFW recommends conducting the following evaluation of the Project site,

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incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 11: Bald Eagle Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project site or its vicinity (within 0.5-mile) contains suitable habitat for bald eagle.

Recommended Mitigation Measure 12: Bald Eagle Surveys

CDFW recommends that focused surveys be conducted by experienced biologists at the Project site prior to Project implementation. To avoid impacts to this species, CDFW recommends conducting the surveys in accordance with protocol developed by CDFW (CDFG 2010). If Project activities are to take place during the typical bird breeding season (February 1 through September 15), CDFW recommends that additional pre-activity surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of Project activity.

Recommended Mitigation Measure 13: Bald Eagle Avoidance

In the event that this species is found within 0.5-mile of the Project site, implementation of avoidance measures is warranted. CDFW recommends that a qualified wildlife biologist be on-site during all Project-related activities and that a 0.5-mile no-disturbance buffer be implemented. If the 0.5-mile no-disturbance buffer cannot feasibly be implemented, contacting CDFW for assistance with additional avoidance measures is recommended. Fully addressing potential impacts to bald eagle and requiring measurable and enforceable mitigation in the EIR is recommended.

COMMENT 5: State Threatened, Endangered, or Rare Plant Species

Issue: Special-status plants have the potential to occur in the vicinity of the Project site (CDFW 2020). The Project site, including the northern trunk gravity pipeline route, is adjacent habitat that may support special-status plants meeting the definition of rare or endangered under Fish and Game Code sections 1901 and 1907 and CEQA Guidelines section 15380.

Specific impact: Without appropriate avoidance and minimization measures potential impacts to special-status plants include inability to reproduce and direct mortality. Unauthorized take of plant species listed as threatened, endangered, or rare pursuant to CESA or the Native Plant Protection Act is a violation of Fish and Game Code.

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Evidence impact would be significant: Many special-status plants are narrowly distributed endemic species. These species are threatened with habitat loss and habitat fragmentation resulting from development, vehicle and foot traffic, road maintenance, and introduction of non-native plant species (CNPS 2020). Therefore, impacts of the Project have the potential to significantly impact populations of the species mentioned above.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to special-status plants, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 14: Special-Status Plant Focused Surveys

CDFW agrees with Mitigation Measure BIO-1 of the DEIR that surveys for special status botanical surveys will follow the “Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities” (CDFW 2018). 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.

Recommended Mitigation Measure 15: Special-Status Plant Avoidance

CDFW recommends special-status plant species be avoided whenever possible by delineation and observing a no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special-status plant species. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species.

Recommended Mitigation Measure 16: Special-Status Plant Take Authorization

If a State-listed or State rare plant is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, acquisition of an ITP or a Native Plant Protection Act Incidental Take Permit issued by CDFW Pursuant to Fish and Game Code section 2081 subdivision (b) and/or section 1900 et seq is necessary to comply with CESA and the Native Plant Protection Act.

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COMMENT 6: Burrowing Owl (BUOW)

Issue: BUOW may occur within and/or adjacent to the Project site. BUOW inhabit open grassland containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. Habitat both within and bordering the Project site, supports grassland habitat (CDFW 2020).

Specific impact: Potentially significant direct impacts associated with subsequent activities and development include burrow collapse, inadvertent entrapment, nest abandonment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

Evidence impact is potentially significant: BUOW rely on burrow habitat year-round for their survival and reproduction. Habitat loss and degradation are considered the greatest threats to BUOW in California's Central Valley (Gervais et al. 2008). The Project site contain and is bordered by some of the only remaining undeveloped land in the vicinity. Therefore, subsequent ground-disturbing activities associated with Project approval have the potential to significantly impact local BUOW populations. In addition, and as described in CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), excluding and/or evicting BUOW from their burrows is considered a potentially significant impact under CEQA.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Environmental Setting and Related Impact)

To evaluate potential impacts to BUOW associated with the Project, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 17: BUOW Surveys

CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys following the California Burrowing Owl Consortium's "Burrowing Owl Survey Protocol and Mitigation Guidelines" (CBOC 1993) and CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012). Specifically, CBOC and CDFW's Staff Report suggest three or more surveillance surveys conducted during daylight with each visit occurring at least three weeks apart during the peak breeding season (April 15 to July 15), when BUOW are most detectable.

Recommended Mitigation Measure 18: BUOW Avoidance

CDFW recommends no-disturbance buffers, as outlined in the "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), be implemented prior to and during any

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ground-disturbing activities. Specifically, CDFW’s Staff Report recommends that impacts to occupied burrows be avoided in accordance with the following table unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: 1) the birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting sites	April 1-Aug 15	200 m*	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

* meters (m)

II. Editorial Comments and/or Suggestions

Federally Listed Species: CDFW recommends consulting with the USFWS on potential impacts to federally listed species including, but not limited to, CTS, succulent owl’s-clover, Colusa grass, and San Joaquin Valley Orcutt grass. Take under the Federal Endangered Species Act (FESA) is more broadly defined than CESA; take under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of any ground-disturbing activities.

Lake and Streambed Alteration: The Project traverses through laterals, sloughs, canals, and blue-lined waterways (i.e. Fahrens Creek and Bear Creek). Activities within these features are subject to CDFW’s lake and streambed alteration regulatory authority. The Project have the potential to cause deposition of debris, waste, sediment, toxic runoff or other materials into water causing water pollution and degradation of water quality.

CDFW agrees with the DEIR that a Fish and Game Code section 1602 Stream Alteration Agreement will be pursued with CDFW. Project-related activities that have the potential to change the bed, bank, and channel of streams or lakes, including but not requiring alterations to riparian vegetation, are subject to CDFW’s regulatory authority pursuant Fish and Game Code section 1600 et seq.. Fish and Game Code section 1600 et seq. requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. “Any river, stream, or

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lake” includes those that are ephemeral or intermittent as well as those that are perennial. It is important to note, CDFW is required to comply with CEQA, as a Responsible Agency, when issuing a Lake and Streambed Alteration Agreement (LSAA). If inadequate, or no environmental review, has occurred, for the Project activities that are subject to notification under Fish and Game Code section 1602, CDFW will not be able to issue the Final LSAA until CEQA analysis for the project is complete. This may lead to considerable Project delays. For additional information on notification requirements, please contact our staff in the Lake and Streambed Alteration Program at (559) 243-4593.

Nesting birds: CDFW encourages that Project implementation occur during the bird non-nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the breeding season (February through mid-September), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project sites to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. In addition to direct impacts (i.e. nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction areas would be concealed from a nest site by topography. CDFW recommends that a qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

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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 can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

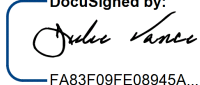
FILING FEES

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be 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 & Game Code, § 711.4; Pub. Resources Code, § 21089).

CDFW appreciates the opportunity to comment on the Project to assist the City of Merced in identifying and mitigating the Project's impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). If you have any questions, please contact Jim Vang, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 243-4014 extension 254, or by electronic mail at Jim.Vang@wildlife.ca.gov.

Sincerely,

DocuSigned by:

FA83F09FE08945A...
Julie A. Vance
Regional Manager

cc: California Regional Water Quality Control Board
Central Valley Region
1685 "E" Street
Fresno, California 93706-2020

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United State Army Corps of Engineers
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Linda Connolly, CDFW

Attachment

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Attachment 1

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM
(MMRP)**

PROJECT: City of Merced Wastewater Collection System Master Plan

SCH No.: 2018071019

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
Mitigation Measure 1: SWHA Surveys	
Mitigation Measure 3: SWHA Take Authorization	
Mitigation Measure 4: SWHA Nest Trees	
Mitigation Measure 5: Focused CTS Protocol-level Surveys	
Mitigation Measure 7: CTS Take Authorization	
Mitigation Measure 8: TRBL Surveys	
Mitigation Measure 10: TRBL Take Avoidance	
Mitigation Measure 11: Bald Eagle Habitat Assessment	
Mitigation Measure 12: Bald Eagle Surveys	
Mitigation Measure 14: Special-Status Plant Focused Surveys	
Mitigation Measure 16: Special-Status Plant Take Authorization	
Mitigation Measure 17: BUOW Surveys	
<i>During Construction</i>	
Mitigation Measure 2: SWHA No-disturbance Buffer	
Mitigation Measure 6: CTS Avoidance	
Mitigation Measure 9: TRBL Avoidance	
Mitigation Measure 13: Bald Eagle Avoidance	
Mitigation Measure 15: Special-Status Plant Avoidance	
Mitigation Measure 18: BUOW Avoidance	

Attachment 2

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM
(MMRP)**

**PROJECT: City of Merced Wastewater Collection System Master Plan
Update**

SCH No.: 2018071019

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
Swainson's Hawk (SWHA)	
Recommended Mitigation Measure 2: SWHA take authorization	
Tricolored Blackbird (TRBL)	
Recommended Mitigation Measure 3: TRBL take authorization	
California Tiger Salamander (CTS)	
Recommended Mitigation Measure 4: CTS protocol-level surveys	
Recommended Mitigation Measure 6: CTS take authorization	
BAEA and GOEA (FPR) Fully Protected Raptors	
Recommended Mitigation Measure 7: FPR surveys	
Western Burrowing Owl (BUOW)	
Recommended Mitigation Measure 10: BUOW take authorization	
Crotch's Bumble Bee (CBB)	
Recommended Mitigation Measure 11: CBB habitat assessment	
Recommended Mitigation Measure 12: CBB focused surveys	
Recommended Mitigation Measure 14: CBB take authorization	
American Badger (AMBA)	
Recommended Mitigation Measure 15: AMBA focused survey	
Western Spadefoot (WESP)	
Recommended Mitigation Measure 17: WESP focused surveys	
Branchiopods (BRA)	

Recommended Mitigation Measure 19: BRA surveys and CDFW consultation	
Special-status plants (SSP)	
Recommended Mitigation Measure 20: SSP Consultation and take authorization	
<i>During Construction</i>	
Swainson's hawk (SWHA)	
Recommended Mitigation Measure 1: SWHA avoidance buffer	
California Tiger Salamander (CTS)	
Recommended Mitigation Measure 5: CTS avoidance buffer	
BAEA and GOEA (FPR) fully protected raptors	
Recommended Mitigation Measure 8: FPR avoidance buffer	
Western Burrowing Owl (BUOW)	
Recommended Mitigation Measure 9: BUOW avoidance buffer	
Crotch's Bumble bee	
Recommended Mitigation Measure 13: CBB avoidance buffer	
American Badger (AMBA)	
Recommended Mitigation Measure 16: AMBA avoidance buffer	
Western Spadefoot (WESP)	
Recommended Mitigation Measure 18: WESP avoidance buffer	