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Jul 21 2020

STATE CLEARINGHOUSE

July 21, 2020

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**Subject: Clean Harbors WMU Solid Waste Disposal Facility by Clean Harbors
Buttonwillow, LLC (Project)
Notice of Preparation (NOP)
State Clearinghouse No. 2020069034**

Dear Ms. Mayes:

The California Department of Fish and Wildlife (CDFW) received a NOP for an Environmental Impact Report (EIR) from Kern County, as Lead Agency, for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹ The Project proponent is Clean Harbor.

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 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 biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological

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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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, 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.

As a responsible agency, 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.

CDFW has jurisdiction over fully protected species of birds, mammals, amphibians and reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species is prohibited and CDFW cannot authorize their incidental take. However, CDFW may authorize, pursuant to Fish and Game Code section 2081.12, by permit, the take or possession of the State fully-protected blunt-nosed leopard lizard (*Gambelia sila*) resulting from impacts attributable to or otherwise related to the Project.

Other Rare 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 pursuant to CESA and/or the federal Endangered Species Act (ESA) to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for a listing as E, R, or T under CESA and/or ESA as specified in the CEQA Guidelines (Cal. Code Regs. tit. 14, Chapter 3, § 15380), it should be fully considered in the environmental analysis for the Project.

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).

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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 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 the streams and wetlands include the following: increased sediment input from road or structure runoff; and toxic runoff associated with construction activities and Project implementation. 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.

PROJECT DESCRIPTION SUMMARY

Proponent: Clean Harbors. The Lead Agency is Kern County for the purposes of CEQA.

Objective:

The primary Project objective of the 640 acre project is the expansion of an existing permitted disposal area to: construct and operate additional non-hazardous waste landfill units; accommodate a soil stockpile area; increase permitted disposal capacity for non-hazardous waste; construct and operate four (4) new hazardous waste tank treatment buildings; construct and operate a latex paint recycling building. Approximately 320 acres of the Project consist of the existing Clean Harbor Buttonwillow Facility (facility), and the other 320 acres of the Project is undeveloped land directly east and adjacent to the existing facility. The existing facility is a Class I hazardous and Class II non-hazardous commercial waste management facility that accepts solid, semi-solid, and liquid waste for treatment, storage, or disposal.

The Project also includes land use changes, which include:

- Amendment of the Kern County General Plan of approximately 320 acres (parcel 099-251-32) from existing 8.3 (Extensive Agriculture, 20 min acres) to 3.4 (Solid Waste Disposal Facility).
- Amendment of the Kern County General Plan Appendix E Map from “Petroleum Waste Management” to the current “Clean Harbors” name and revised permitted facility boundary with the designated buffer property area.
- Zone change of 640 acres (parcel 099-290-17 and 099-251-32) from A (Exclusive Agriculture) to M-3 (Heavy Industrial)
- Remove both parcels (099-290-17 and 099-251-32) from Agriculture Preserve No. 2
- Change the existing CUP No. 4, Map No. 97 to include:
 - An increase in permitted facility from 320 acres to 640 acres to include the expansion parcel for the soil stockpile area.

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- An increase in permitted disposal from 160 disposal acres to 193.3 acres for the additional non-hazardous waste landfill unit (WMU 36, 37, 38)
- An increase in permitted disposal capacity from 13,250,000 cubic yards to 16,674,000 for the addition of non-hazardous waste landfill units (WMU 36, 37, 38) within the existing facility boundary.
- Construct four (4) new hazardous waste treatment building (tank treatment buildings) to support proposed changes to the Hazardous Waste Facility Permit renewal application as required by the Department of Toxic Substances Control (DTSC).
- Construct one (1) latex paint recycling building.

Location: The Project is located at 2500 West Lokern Road, approximately eight (8) miles west of Buttonwillow, in the unincorporated area of Kern County, California. Within Sections 15 and 16 of Township 29 South Range 22 East, Mount Diablo Base and Meridian. Accessor Parcel Numbers: 099-290-17 and 099-251-32.

Timeframe: Unspecified

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the County 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 CEQA document.

Aerial imagery of the Project boundary and its surroundings show the 320-acre expansion area consist of undeveloped land that may have suitable habitat for special-status species. Based on a review of the Project description, a review of California Natural Diversity Database (CNDDDB) records, and the surrounding habitat, several special-status species could potentially be impacted by Project activities.

Currently, the NOP acknowledges that the Project area is within the geographic range of several special-status animal species including the State and federally endangered and State fully protected blunt-nosed leopard lizard (*Gambelia sila*); the State and federally endangered Tipton kangaroo rat (*Dipodomys nitratooides nitratooides*) and giant kangaroo rat (*Dipodomys ingens*); the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*); the State threatened Swainson's hawk (*Buteo swainsoni*) and San Joaquin (also known as Nelson's) antelope squirrel (*Ammospermophilus nelsoni*); the federally endangered Buena Vista Lake shrew (*Sorex ornatus relictus*); and the State species of special concern western snowy plover (*Charadrius alexandrinus nivosus*). The NOP also acknowledges that the Project area is in the range of several special-status plant species including the State and federally

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endangered and California rare plant rank (CRPR) 1B.1 California jewelflower (*Caulanthus californicus*); the federally endangered and CRPR 1B.2 San Joaquin woollythreads (*Monolopia congdonii*) and Kern mallow (*Eremalche parryi* ssp. *kernensis*).

In addition, CDFW is concerned Project-related activities could potentially impact special-status species and habitats known to occur in the area not mentioned in the NOP, including, but not limited to, the following: the State Candidate Endangered crotch bumblebee (*Bombus crotchii*); the State species of special concern American badger (*Taxidea taxus*), short-nosed kangaroo rat (*Dipodomys nitratoides brevinasus*), Tulare grasshopper mouse (*Onychomys torridus tularensis*), San Joaquin pocket mouse (*Perognathus inornatus*), burrowing owl (*Athene cunicularia*), Le Conte's thrasher (*Toxostoma lecontei*), loggerhead shrike (*Lanius ludovicianus*), San Joaquin coachwhip (*Masticophis flagellum ruddocki*), Temblor legless lizard (*Anniella alexanderae*), California glossy snake (*Arizona elegans occidentalis*), western spadefoot (*Spea hammondi*), and coast (also known as Blainville's) horned lizard (*Phrynosoma blainvillii*); CRPR 1B.1 listed Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), pale-yellow layia (*Layia heterotricha*), showy golden madia (*Madia radiata*), and oil neststraw (*Stylocline citroleum*); the California Rare Plant Rank 1B.2 listed heartscale (*Atriplex cordulata* var. *cordulata*), Lost Hills crownscale (*Atriplex coronata* var. *vallicola*), Lemmon's jewelflower (*Caulanthus lemmonii*), recurved larkspur (*Delphinium recurvatum*), and Temblor buckwheat (*Eriogonum temblorense*); and the CRPR 4.2 which was also federally delisted Hoover's eriastrum (*Eriastrum hooveri*). Sensitive habitats in the Project area include valley saltbush scrub. The Lokern area has one of the last remaining intact valley saltbush scrub habitats.

Please note that the 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. Therefore, a lack of an occurrence record in the CNDDDB is not tantamount to a negative species finding. In order to adequately assess any potential Project-related impacts to biological resources, surveys conducted by a qualified wildlife biologist or 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 the Project area.

As such, CDFW requests that the EIR fully identify potential impacts to biological resources, including the above-mentioned species. In order to adequately assess any potential impact to biological resources, focused biological surveys should be conducted by a qualified wildlife biologist/botanist during the appropriate survey period(s) in order to determine whether any special-status species and/or suitable habitat features may be present within the Project area. Properly conducted biological surveys, and the information assembled from them, are essential to identify any mitigation, minimization,

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and avoidance measures and/or the need for additional or protocol-level surveys, and to identify any Project-related impacts under CESA and other species of concern. CDFW recommends that the following be incorporated into the EIR.

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)?

COMMENT 1: Blunt-nosed Leopard Lizard (*Gambelia sila*; BNLL)

Issue: BNLL have been documented within the Project area (CDFW 2020). Suitable BNLL habitat includes areas of grassland and upland scrub that contain requisite habitat elements, such as small mammal burrows. BNLL also use open space patches between suitable habitats, including disturbed sites, unpaved access roadways, and canals. The NOP states that the project area is entirely disturbed, however, review of aerial imagery indicates that the undeveloped portion of the Project area (320 acres expansion area) and its vicinity are comprised of these habitat features, making it potentially suitable for BNLL. Therefore, there is potential for BNLL to occupy or colonize the Project.

Specific impact: Without appropriate avoidance and minimization measures for BNLL, potentially significant impacts associated with ground-disturbing activities include habitat loss, burrow collapse, reduced reproductive success, reduced health and vigor of eggs and/or young, and direct mortality.

Evidence impact is potentially significant: Habitat loss resulting from agricultural, urban, and industrial development is the primary threat to BNLL (ESRP 2020a). The Lokern area has one of the last remaining intact valley saltbush scrub habitats. Little suitable habitat for BNLL remains in central Kern County (USFWS 1998). The Project and surrounding area contain undeveloped land; therefore, subsequent ground disturbing activities and conversion of suitable habitat associated with the Project may have the potential to significantly impact local BNLL populations.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to BNLL associated with subsequent development, CDFW recommends conducting the following evaluation of Project areas and implementing the following mitigation measures as enforceable conditions of the Project.

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Recommended Mitigation Measure 1a: BNLL Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of project implementation, to determine if the Project area or its immediate vicinity contains potential habitat for BNLL.

Recommended Mitigation Measure 1b: BNLL Surveys

If potential habitat is present in the Project area, and prior to initiating any vegetation- or ground-disturbance activities, CDFW recommends conducting surveys in accordance with the “Approved Survey Methodology for the Blunt-nosed Leopard Lizard” (CDFW 2019). This survey protocol, designed to optimize BNLL detectability, reasonably assures CDFW that ground disturbance will not result in take of this fully protected species.

CDFW advises that BNLL surveys be completed no more than one year prior to initiation of ground disturbance. Please note that protocol-level surveys must be conducted on multiple dates during late spring, summer, and fall of the same calendar year, and that within these time periods, there are specific protocol-level date, temperature, and time parameters that must be adhered to. As a result, protocol-level surveys for BNLL are not synonymous with 30-day “preconstruction surveys” often recommended for other wildlife species. In addition, the BNLL protocol specifies different survey effort requirements based on whether the disturbance results from maintenance activities or if the disturbance results in habitat removal (CDFW 2019).

Recommended Mitigation Measure 1c: BNLL Take Avoidance

BNLL detection during protocol-level surveys warrants consultation with CDFW to discuss how to implement ground-disturbing activities and avoid take. Because BNLL is a State Fully Protected species, no take incidental or otherwise, can be authorized by CDFW.

COMMENT 2: San Joaquin Kit Fox (*Vulpes macrotis mutica*; SJKF)

Issue: SJKF occurrences have been documented within the Project area (CDFW 2020). Review of aerial imagery indicates that portions of the Project area and its vicinity are comprised of annual grassland, a habitat type suitable to support SJKF. SJKF den in a variety of areas such as rights-of-way, vacant lots, agricultural and fallow or ruderal habitat, dry stream channels, and canal levees, and populations can fluctuate over time. SJKF are also capable of occupying urban environments (Cypher and Frost 1999). SJKF may be attracted to Project areas due to the type and level of ground-disturbing activities and the loose, friable soils resulting from

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intensive ground disturbance. SJKF will forage in fallow and agricultural fields and utilize streams and canals as dispersal corridors. As a result, there is potential for SJKF to occupy all suitable habitat within the Project boundary and surrounding area.

Specific impact: Without appropriate avoidance and minimization measures for SJKF, potential significant impacts associated with Project-related activities include, den collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

Evidence impact is potentially significant: Habitat loss resulting from land conversion to agricultural, urban, and industrial development is the primary threat to SJKF (Cypher et al. 2013). Western Kern County supports relatively large areas of high suitability habitat and one of the largest remaining populations of SJKF (Cypher et al. 2013). The Project and surrounding area contain undeveloped land; therefore, subsequent ground disturbing activities and conversion of suitable habitat associated with the Project may have the potential to significantly impact local SJKF populations.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to SJKF associated with Project activities, CDFW recommends conducting the following evaluation of project areas and implementing the following mitigation measures.

Recommended Mitigation Measure 2a: SJKF Habitat Assessment

For all Project-specific components including construction and land conversion, CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project area or its immediate vicinity contains potential habitat for SJKF.

Recommended Mitigation Measure 2b: SJKF Surveys

If potential habitat is present, CDFW recommends assessing presence/absence of SJKF by conducting surveys following the USFWS' "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (2011). Specifically, CDFW advises conducting these surveys in all areas of potentially suitable habitat no less than 14-days and no more than 30-days prior to beginning of ground disturbing activities.

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Recommended Mitigation Measure 2c: SJKF Avoidance

CDFW recommends implementing no-disturbance buffers, as described in the USFWS “Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance” (2011) around den sites.

Recommended Mitigation Measure 2d: SJKF Take Authorization

SJKF detection warrants consultation with CDFW to discuss how to avoid take or, if avoidance is not feasible, to acquire an Incidental Take Permit (ITP) prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081 subdivision (b).

COMMENT 3: Tipton Kangaroo Rat (*Dipodomys nitratoides nitratoides*; TKR), Giant Kangaroo Rat (*Dipodomys ingens*; GKR), and Short-Nosed Kangaroo Rat (*Dipodomys nitratoides brevinasus*; SNKR)

Issue: TKR, GKR, and SNKR have been documented to occur within the Project area (CDFW 2020). These species inhabit sandy-loam soils located in grassland habitat with scattered shrubs. Suitable habitat includes areas of grassland, upland scrub, and alkali sink habitats that contain requisite habitat elements, such as small mammal burrows. The NOP states that the project area is entirely disturbed, however, review of aerial imagery indicates that the undeveloped portion of the Project area (320 acres expansion area) reveals that suitable habitat for these species may be present both within and in the vicinity of the Project area. . Therefore, there is potential for these species to occupy or colonize the Project.

Specific impact: Without appropriate avoidance and minimization measures for TKR, GKR, and SNKR, potential significant impacts from Project activities include loss of habitat, burrow collapse, inadvertent entrapment of individuals, reduced reproductive success such as reduced health or vigor of young, and direct mortality of individuals.

Evidence impact is potentially significant: Habitat loss resulting from agricultural, urban, and industrial development is the primary threat to TKR, GKR, and SNKR. Further, habitat fragmentation may accelerate the decline of these species. The Lokern area has one of the last remaining intact valley saltbush scrub habitats, little suitable intact habitat remains for these species (USFWS 1998, ESRP 2020b, ESRP 2020c, and ESRP 2020d). The Project and surrounding area contain undeveloped land; therefore, if the Project area is occupied by TKR, GKR, or SNKR subsequent ground disturbing activities and conversion of suitable habitat associated with the Project may have the potential to significantly impact local populations of these species.

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Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to TKR, GKR, and SNKR associated with Project activities, CDFW recommends conducting the following evaluation of Project areas and implementing the following mitigation measures as enforceable conditions of the Project.

Recommended Mitigation Measure 3a: TKR, GKR, and SNKR Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project area or its immediate vicinity contains potential habitat for TKR, GKR, and SNKR.

Recommended Mitigation Measure 3b: TKR, GKR, and SNKR Trapping Surveys

If potential habitat is present, CDFW recommends that a trapping plan for determining presence of TKR, GKR, and SNKR be submitted to and approved by CDFW prior to subsequent trapping efforts. CDFW recommends these surveys be conducted by a qualified biologist who holds a CDFW Memorandum of Understanding for TKR, GKR, and SNKR, and any appropriate USFWS permit(s). CDFW further recommends that these surveys be conducted between April 1 and October 31, when kangaroo rats are most active and well in advance of ground-disturbing activities in order to determine if impacts to TKR, GKR, and SNKR could occur.

Recommended Mitigation Measure 3c: TKR, GKR, and SNKR Avoidance

If potential habitat is present and trapping is not feasible, CDFW advises maintenance of a 50-foot minimum no-disturbance buffer around all small mammal burrow entrances.

Recommended Mitigation Measure 3d: TKR and GKR Take Authorization

If TKR and GKR are found within the Project area during preconstruction surveys or construction activities, consultation with CDFW is advised to discuss how to implement the Project and avoid take; or if avoidance is not feasible, to acquire an ITP prior to any ground-disturbing activities, pursuant Fish and Game Code Section 2081 subdivision (b).

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**COMMENT 4: San Joaquin (also known as Nelson's) Antelope Squirrel
(*Ammospermophilus nelsoni*; SJAS)**

Issue: SJAS have been documented to occur within the Project area (CDFW 2020). Suitable SJAS inhabit sandy-loam soils in areas of grassland, upland scrub, and alkali sink habitats that contain requisite habitat elements, such as small mammal burrows. The NOP states that the project area is entirely disturbed, however, review of aerial imagery of the undeveloped portion of the Project area (320 acres expansion area) reveals that suitable habitat for this species may be present both within and in the vicinity of the Project area. Therefore, there is potential for SJAS to occupy or colonize the Project.

Specific impact: Without appropriate avoidance and minimization measures for SJAS, potential significant impacts include loss of habitat, burrow collapse, inadvertent entrapment of individuals, reduced reproductive success such as reduced health or vigor of young, and direct mortality of individuals.

Evidence impact is potentially significant: Habitat loss resulting from agricultural, urban, and industrial development is the primary threat to SJAS. Further, habitat fragmentation may accelerate the decline of the species. The Lokern area has one of the last remaining intact valley saltbush scrub habitats. Very little suitable habitat for this species remains outside of the western Kern County and eastern San Luis Obispo County area (ESRP 2020e, USFWS 1998). The Project and surrounding area contain undeveloped land; therefore, subsequent ground disturbing activities and habitat conversion associated with the Project may have the potential to significantly impact local SJAS populations.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to SJAS associated with subsequent development, CDFW recommends conducting the following evaluation of Project areas and implementing the following mitigation measures as enforceable conditions of the Project.

Recommended Mitigation Measure 4a: SJAS Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of project implementation, to determine if the Project area or its immediate vicinity contains potential habitat for SJAS.

Recommended Mitigation Measure 4b: SJAS Surveys

In areas of potential habitat, CDFW recommends that a qualified biologist conduct focused daytime visual surveys for SJAS using line transects with 10- to 30-meter

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spacing. CDFW further advises that these surveys be conducted between April 1 and September 20, during daytime temperatures between 68° and 86° F, to maximize detectability (CDFG 1990).

Recommended Mitigation Measure 4c: SJAS Avoidance

If potential habitat is present and surveys are not feasible, CDFW advises maintenance of a 50-foot minimum no-disturbance buffer around all small mammal burrow entrances until the completion of Project activities.

Recommended Mitigation Measure 4d: SJAS Take Authorization

SJAS detection warrants consultation with CDFW to discuss how to avoid take or, if avoidance is not feasible, to acquire a State ITP prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081 subdivision (b).

COMMENT 5: Swainson's Hawk (*Buteo swainsoni*; SWHA)

Issue: SWHA have the potential to nest near the Project site, and forage within the Project site. SWHA have been documented to occur approximately 4 miles from the Project site (CDFW 2020), additional nest sites have been documented within 10 miles and the Project site provides potential foraging habitat (CDFG, 1994). Landscape trees may also provide suitable nesting habitat. In addition, grassland and agricultural land in the surrounding area provide suitable foraging habitat for SWHA, increasing the likelihood of SWHA occurrence within the vicinity.

Specific impact:

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. All trees, including non-native or ornamental varieties, near the Project site may provide potential nesting sites.

Evidence impact would be significant: SWHA exhibit high nest-site fidelity year after year and lack of suitable nesting habitat limits their local distribution and abundance (CDFW 2016). Approval of the Project may lead to subsequent ground-disturbing activities that involve noise, groundwork, construction of structures, and movement of workers that could affect nests and has the potential to result in nest abandonment and loss of foraging habitat, significantly impacting local nesting SWHA. In addition, conversion of undeveloped land can directly influence distribution and abundance of SWHA, due to the reduction in foraging habitat.

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Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to SWHA associated with Project activities, CDFW recommends conducting the following evaluation of Project areas and implementing the following mitigation measures as enforceable conditions of the Project.

Recommended Mitigation Measure 5a: Focused SWHA Surveys

To evaluate potential Project-related impacts, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting SWHA following the entire survey methodology developed by the SWHA Technical Advisory Committee (SWHA TAC 2000) prior to Project implementation (during CEQA analysis), including the 0.5-mile survey distance from the limits of disturbance. SWHA detection during protocol-level surveys warrants consultation with CDFW to discuss how to implement Project activities and avoid take.

Recommended Mitigation Measure 5b: SWHA Avoidance

CDFW recommends that 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, a minimum ½-mile no-disturbance buffer be delineated and maintained around each nest, regardless if when it was detected by surveys or incidentally, 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 5c: SWHA Take Authorization

CDFW 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 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 5d: Loss of SWHA Foraging Habitat

CDFW recommends compensation for the loss of SWHA foraging habitat as described in CDFW's "Staff Report Regarding Mitigation for Impacts to Swainson's Hawks" (CDFG 1994) to reduce impacts to foraging habitat to less than significant. The Staff Report recommends that mitigation for habitat loss occur within a minimum distance of 10 miles from known nest sites. CDFW has the following recommendations based on the Staff Report:

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- For projects within 1 mile of an active nest tree, a minimum of 1 acre of habitat management (HM) land for each acre of development is advised.
- For projects within 5 miles of an active nest but greater than 1 mile, a minimum of $\frac{3}{4}$ acre of HM land for each acre of development is advised.
- For projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree, a minimum of $\frac{1}{2}$ acre of HM land for each acre of development is advised.

Recommended Mitigation Measure 5e: SWHA Tree Removal

CDFW recommends that the removal of known SWHA 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 area or in another area that will be protected in perpetuity. This mitigation would offset the local and temporal impacts of nesting habitat loss.

COMMENT 6: Special-Status Plants

Issue: Several special-status plant species meeting the definition of rare or endangered under CEQA section 15380 are known to occur within the Project area, but not limited to, the State and federally endangered and CRPR 1B.1 California jewelflower (*Caulanthus californicus*); the federally endangered and CRPR 1B.2 San Joaquin woollythreads (*Monolopia congdonii*) and Kern mallow (*Eremalche parryi* ssp. *kernensis*).

Specific impact: Without appropriate avoidance and minimization measures for special-status plants, potential significant impacts associated with subsequent construction include loss of habitat, loss or reduction of productivity, and direct mortality.

Evidence impact would be significant: The California jewelflower, San Joaquin woollythreads, Kern mallow, and many other special-status plant species are threatened by grazing and agricultural, urban, and energy development. Many historical occurrences of these species are presumed extirpated (CNPS 2020). Though new populations have recently been discovered, impacts to existing populations have the potential to significantly impact populations of plant species.

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Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to special-status plants associated with subsequent development, CDFW recommends conducting the following evaluation of Project areas and implementing the following mitigation measures.

Recommended Mitigation Measure 6a: Special-Status Plant Surveys

CDFW recommends that individual Project sites be surveyed for special-status plants by a qualified botanist following the “Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities” (CDFG 2018). This protocol, which is intended to maximize detectability, includes the identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period.

Recommendation Mitigation Measure 6b: Sensitive Natural Communities

In addition to surveying for special-status plants as stated above, CDFW recommends the Project area is also surveyed for the presence of sensitive natural communities, which is also part of CDFW’s botanical survey protocol (CDFW 2018). The Lokern area has one of the last remaining intact valley saltbush scrub habitats, this natural community may be considered a sensitive natural community per CDFW’s botanical survey protocol. If sensitive natural communities are found, CDFW recommend impacts to them are fully evaluated in the CEQA document.

Recommended Mitigation Measure 6c: Special-Status Plant Avoidance

CDFW recommends that special-status plant species be avoided whenever possible by delineating 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 may be warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species.

Recommended Mitigation Measure 6e: Listed Plant Species Take Authorization

If a State-listed plant species is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization is warranted. Take authorization would occur through issuance of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b).

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COMMENT 7: Crotch Bumble Bee (*Bombus crotchii*; CBB)

Issue: On June 28, 2019, the Fish and Game Commission published findings of its decision to advance CBB to candidacy as endangered. Pursuant to Fish and Game Code section 2074.6, CDFW has initiated a status review report to inform the Commission's decision on whether listing of CBB, pursuant to CESA, is warranted. During the candidacy period, consistent with CEQA Guidelines, section 15380, the status of the CBB as an endangered candidate species under CESA (Fish & G. Code, § 2050 et seq.) qualifies it as an endangered, rare, or threatened species under CEQA. It is unlawful to import into California, export out of California or take, possess, purchase, or sell within California, CBB and any part or product thereof, or attempt any of those acts, except as authorized pursuant to CESA. Under Fish and Game Code section 86, take means to hunt, pursue, catch, capture, or kill, or to attempt to hunt pursue, catch, capture, or kill. Consequently, take of CBB during the status review period is prohibited unless authorization pursuant to CESA is obtained.

CBB have been documented to occur within the vicinity of the Project area (CDFW 2019). Suitable CBB habitat includes areas of grasslands and upland scrub that contain requisite habitat elements, such as small mammal burrows. CBB primarily nest in late February through late October underground in abandoned small mammal burrows, but may also nest under perennial bunch grasses or thatched annual grasses, under brush piles, in old bird nests, and in dead trees or hollow logs (Williams et al. 2014; Hatfield et al. 2015). Overwintering sites utilized by CBB mated queens include soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014). Therefore, ground disturbance and vegetation removal associated with Project implementation has the potential to significantly impact local CBB populations.

Specific impact: Without appropriate avoidance and minimization measures for CBB, potentially significant impacts associated with ground- and vegetation-disturbing activities associated with construction of the Project include loss of foraging plants, changes in foraging behavior, burrow collapse, nest abandonment, reduced nest success, reduced health and vigor of eggs, young and/or queens, in addition to direct mortality in violation of Fish and Game Code.

Evidence impact is potentially significant: CBB was once common throughout most of the central and southern California, however, it now appears to be absent from most of it, especially in the central portion of its historic range within California's Central Valley (Hatfield et al. 2014). Analyses by the Xerces Society et al. (2018) suggest there have been sharp declines in relative abundance by 98% and persistence by 80% over the last ten years.

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Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to CBB associated with the Project, CDFW recommends implementing the following mitigation measure as a condition of approval for the Project.

Recommended Mitigation Measure 7a: CBB Take Avoidance

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.

COMMENT 8: Burrowing Owl (*Athene cunicularia*; BUOW)

Issue: BUOW are known to occur in the Project area vicinity (CDFW 2020). BUOW inhabit open grassland containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. The NOP states that the project area is entirely disturbed, however, review of aerial imagery of the undeveloped portion of the Project area (320 acres expansion area) reveals that suitable habitat for this species may be present both within and in the vicinity of the Project area. Therefore, there is potential for BUOW to occupy or colonize the Project.

Specific impact: Potentially significant direct impacts associated with subsequent activities and land conversion include habitat loss, 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 and surrounding area contain undeveloped land; therefore, subsequent ground-disturbing activities associated with the Project 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 subsequent development, CDFW recommends conducting the following evaluation of Project areas and

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implementing the following mitigation measures as enforceable conditions of the Project.

Recommended Mitigation Measure 8a: BUOW Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project area or its vicinity contains suitable habitat for BUOW.

Recommended Mitigation Measure 8b: BUOW Surveys

If potential habitat is present on or in the vicinity of the Project area, CDFW recommends assessing presence or 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 the "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), which suggest three or more surveillance surveys conducted during daylight with each visit occurring at least three weeks apart during the peak breeding season (i.e., April 15 to July 15), when BUOW are most detectable. In addition, CDFW advises that surveys include a minimum 500-foot buffer area around the Project area.

Recommended Mitigation Measure 8c: BUOW Avoidance

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

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Recommended Mitigation Measure 8d: BUOW Passive Relocation and Mitigation

If BUOW are found within these recommended buffers and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), excluding birds from burrows is not a take avoidance, minimization, or mitigation method and is instead considered a potentially significant impact under CEQA. However, if it is necessary for Project implementation, CDFW recommends that burrow exclusion be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance. CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of one (1) burrow collapsed to one (1) artificial burrow constructed (1:1) to mitigate for evicting BUOW and the loss of burrows. BUOW may attempt to colonize or re-colonize an area that will be impacted; thus, CDFW recommends ongoing surveillance at a rate that is sufficient to detect BUOW if they return.

COMMENT 9: Temblor legless lizard (*Anniella alexanderae*; LL)

Issue: LL have been documented in the Project area (CDFW 2020). Legless lizard are found primarily in areas with moist warm loose organic soils with plant cover or where there is plenty of leaf or debris litter (Zeiner et al., 1990).

Specific impact: Without appropriate avoidance and minimization measures for LL potentially significant impacts associated with the Project's activities could include site abandonment which may result in reduced health or vigor of eggs and/or young, and/or direct mortality.

Evidence impact is potentially significant: Habitat loss is a primary threat to LL (Zeiner et al., 1990). The Project and surrounding area contain undeveloped land that may support this species; therefore, subsequent ground disturbing activities and habitat conversion associated with the Project may have the potential to significantly impact local LL population.

Recommended Potentially Feasible Mitigation Measure(s):

To evaluate potential impacts to LL, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures as enforceable conditions of the Project.

Recommended Mitigation Measure 9a: LL Surveys

CDFW recommends a qualified biologist determine if potential habitat is present on the Project site. If potential habitat is present, CDFW recommends that a qualified

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biologist conduct focused surveys for LL and their requisite habitat features to evaluate potential impacts resulting from ground-disturbance.

Recommended Mitigation Measure 9b: LL Avoidance

Avoidance whenever possible is encouraged via delineation however, a qualified biologist with the appropriate permit may relocate LL out of the project area into a nearby area with suitable habitat.

COMMENT 10: Other State Species of Special Concern

Issue: Le Conte's thrasher (*Toxostoma lecontei*), loggerhead shrike (*Lanius ludovicianus*), western snowy plover (*Charadrius alexandrinus nivosus*), Tulare grasshopper mouse (*Onychomys torridus tularensis*), San Joaquin pocket mouse (*Perognathus inornatus*), San Joaquin coachwhip (*Masticophis flagellum ruddocki*), Temblor legless lizard (*Anniella alexanderae*), California glossy snake (*Arizona elegans occidentalis*), western spadefoot (*Spea hammondi*), and coast (also known as Blainville's) horned lizard (*Phrynosoma blainvillii*) and have the potential to occur in the Project area. All the species mentioned above have been documented to occur in the vicinity of the Project, which supports requisite habitat elements for these species (CDFW 2020).

Specific impact: Without appropriate avoidance and minimization measures for these species, potentially significant impacts associated with ground disturbance include habitat loss, nest/den/burrow abandonment, which may result in reduced health or vigor of eggs and/or young, and direct mortality.

Evidence impact is potentially significant: Habitat loss threatens all of the species mentioned above (Gittleman et al. 2001, Shuford and Gardali 2008, Thomson et al. 2016). The Project and surrounding area contain undeveloped land; therefore, subsequent ground disturbing activities and habitat conversion associated with the Project may have the potential to significantly impact local the populations of these species.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to special-status species associated with subsequent development, CDFW recommends conducting the following evaluation of project areas and implementing the following mitigation measures.

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Recommended Mitigation Measure 10a: Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of project implementation, to determine if project areas or their immediate vicinity contain potential habitat for the species mentioned above.

Recommended Mitigation Measure 10b: Surveys

If potential habitat is present, CDFW recommends that a qualified biologist conduct focused surveys for applicable species and their requisite habitat features to evaluate potential impacts resulting from ground and vegetation disturbance.

Recommended Mitigation Measure 10c: Avoidance

Avoidance whenever possible is encouraged via delineation and observance a 50-foot no-disturbance buffer around dens of mammals like the American badger as well as the entrances of burrows that can provide refuge for small mammals, reptiles, and amphibians, and 100 feet around nests of special-status bird species.

COMMENT 11: CDFW Ecological Reserve

Issue: The proposed Project lies immediately adjacent to CDFW-owned lands at Lokern Ecological Reserve. Construction related ground disturbance and species take are prohibited on ecological reserves. In addition, public access to this property is restricted. Federal and State listed species are known to occur on Lokern Ecological Reserve and within the Lokern Natural Area including BNLL, GKR, SJAS, SJKF, Kern Mallow, and many other special-status species. Direct or indirect impacts of the Project on Lokern Ecological Reserve have the potential to impact State resources, which is prohibited.

Specific impact: Potentially significant impacts to State resources occurring on Lokern Ecological Reserve include habitat loss, reduced species reproductive success, nest/den abandonment, and direct mortality to wildlife and plant species including listed, special-status and common species.

Evidence impact is potentially significant: Fish and Game Code section 1583 states "Except in accordance with the regulations of the commission it is unlawful to enter upon any ecological reserves established under the provisions of the article, or to take therein any bird or the nest or eggs thereof, or any mammal, fish, mollusks, crustaceans, amphibia, reptiles or any other form of plant or animal life." In addition, California Code of Regulations, Title 14, Section 630 states "All ecological reserves are maintained for the primary purpose of developing a statewide program for protection of rare, threatened, or endangered native plants, wildlife, aquatic

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organisms, and specialized terrestrial or aquatic habitat types”, and therefore, any other activity on these lands is restricted. The Lokern Ecological Reserve is nestled within the greater Lokern Natural Area which includes one of the last remaining intact valley saltbush scrub habitats that provides habitat for federal and State listed species as well as many special-status species. A majority of the lands within the Lokern Natural Area are not under permanent protection, therefore, any new development on properties, that provide habitat to listed species, will result in a direct loss of imperiled species and would disrupt the integrity of the ecological reserve by limiting its ability to provide a corridor for gene flow.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts of the Project to Lokern Ecological Reserve, CDFW recommends including the following measure as an enforceable condition of the Project.

Recommended Mitigation Measure 11a: CDFW Consultation

In addition to consultation with CDFW’s Regional CESA staff, CDFW recommends consultation with CDFW’s Regional Ecological Reserve Management Unit staff well in advance of Project initiation to demonstrate accurate delineation of property boundaries to prevent encroachment on CDFW-owned lands. Consultation is also recommended to discuss planned ingress and egress to the Project area for the purposes of preventing encroachment on CDFW-owned lands. Please contact John Battistoni, Regional Ecological Reserve Management Unit Supervisor, at the address on the letterhead above, via email at John.Battistoni@wildlife.ca.gov, or via telephone at 559-243-4014 extension 219.

Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS?

COMMENT 12: Wetland and Riparian Habitats

Issue: The NOP states that there are no creeks or streams on the property, however, U.S. Geological Survey maps indicate that there is an intermittent stream that traverses the undeveloped area of the Project site. Further, review of aerial imagery reveals other potential intermittent streams and hydrological features within the undeveloped portion of the Project. The Project area is in the immediate vicinity of numerous waterways, riparian and wetland areas. Development within the Project has the potential to involve temporary and permanent impacts to waterways, other hydrological features, and riparian habitats.

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Specific impact: Project activities have the potential to result in the loss of riparian and wetland vegetation, in addition to the degradation of wetland and riparian areas through grading, fill, and related development.

Evidence impact is potentially significant: The Project area includes watercourses and wetland features within undeveloped habitats. Riparian and associated floodplain areas are valuable for their ecosystem processes such as protecting water quality by filtering pollutants and transforming nutrients; stabilizing stream banks to prevent erosion and sedimentation/siltation. The Fish and Game Commission policy regarding wetland resources discourages development or conversion of wetlands that results in any net loss of wetland acreage or habitat value. Construction activities within these features also has the potential to impact and changes in stream morphology.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to wetland and riparian habitats associated with subsequent development, CDFW recommends conducting the following evaluation of project areas and implementing the following mitigation measures

Recommended Mitigation Measure 12a: Mapping of Streams and other Hydrological Features

CDFW recommends that formal mapping of all hydrological features be conducted by a qualified biologist or hydrologist, as warranted, to determine the baseline location, extent, and condition of streams (including any floodplain) and other hydrological features within and adjacent to the Project area. CDFW advises that site map(s) depicting the extent of any activities that may affect wetlands, lakes, or streams be included with any Project site evaluations, to clearly identify areas where stream/riparian and wetland habitats could be impacted from Project activities.

Recommended Mitigation Measure 12b: Stream and Riparian Habitat Mitigation

CDFW recommends that the potential direct and indirect impacts to stream/riparian habitat be analyzed according to each Project activity. Based on those potential impacts, CDFW recommends that the EIR include measures to avoid, minimize, and/or mitigate those impacts. CDFW recommends that impacts to riparian habitat (i.e., biotic and abiotic features) take into account the effects to stream function and hydrology from riparian habitat loss or damage, as well as potential effects from the loss of riparian habitat to special-status species already identified herein. CDFW recommends that any losses to stream habitats be offset with corresponding riparian habitat restoration incorporating native vegetation to replace the value to fish and wildlife provided by the habitats lost from Project implementation. If on-site

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restoration to replace habitats is not feasible, CDFW recommends offsite mitigation by restoring or enhancing in-kind riparian habitat and providing for the long-term management and protection of the mitigation area, to ensure its persistence.

Editorial Comments and/or Suggestions

Federally Listed Species: CDFW recommends consulting with USFWS regarding potential impacts to federally listed species including but not limited to the blunt-nosed leopard lizard (*Gambelia sila*), Tipton kangaroo rat (*Dipodomys nitratooides nitratooides*), giant kangaroo rat (*Dipodomys ingens*), San Joaquin kit fox (*Vulpes macrotis mutica*), Buena Vista Lake ornate shrew (*Sorex ornatus relictus*), California jewelflower (*Caulanthus californicus*), San Joaquin woollythreads (*Monolopia congdonii*) and Kern mallow (*Eremalche parryi* ssp. *kernensis*). 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 Project activities.

Lake and Streambed Alteration: Project activities have the potential to substantially change the bed, bank, and channel of lakes, streams, and associated wetlands onsite and/or substantially extract or divert the flow of any such feature that is 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.

CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement (LSAA); therefore, if the CEQA document approved for the Project does not adequately describe the Project 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.

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

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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).

CDFW encourages Project implementation to occur during the bird non-nesting season; however, if Project activities must occur during the breeding season (i.e., 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 disturbance to maximize the probability that nests that could potentially be impacted by the Project are detected. CDFW also recommends that surveys cover a sufficient area around the work site to identify nests and determine their status. A sufficient area means any area potentially affected by a 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 that a qualified biologist continuously monitor nests to detect behavioral changes resulting from the project. If behavioral changes occur, CDFW recommends that the work causing that change cease and CDFW be consulted 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 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 area 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.

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 CNDDDB. The CNDDDB field survey

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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

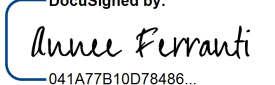
The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order 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

CDFW appreciates the opportunity to comment on the NOP to assist Kern County in identifying and mitigating Project impacts on biological resources.

If you have any questions, please contact Jaime Marquez, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 243-4014, extension 291, or by electronic mail at Jaime.Marquez@wildlife.ca.gov.

Sincerely,

DocuSigned by:

041A77B10D78486...
Julie A. Vance
Regional Manager

Attachment 1

cc:

United States Fish and Wildlife Service
2800 Cottage Way, Suite W-2605
Sacramento, California 95825

ec: Office of Planning and Research
State Clearinghouse
state.clearinghouse@opr.ca.gov

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California Department of Fish and Wildlife

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REFERENCES

- California Burrowing Owl Consortium (CBOC). 1993. Burrowing owl survey protocol and mitigation guidelines. Pages 171-177 *in* Lincer, J. L. and K. Steenhof (editors). 1993. The burrowing owl, its biology and management. Raptor Research Report Number 9.
- California Department of Fish and Game (CDFG). 1990. Approved Survey Methodologies for Sensitive Species. San Joaquin Antelope Squirrel, *Ammospermophilus nelsoni*. California Department of Fish and Game, Region 4. May 8, 1990.
https://www.fws.gov/sacramento/es_species/Accounts/Mammals/giant_kangaroo_rat/documents/980930a.pdf
- CDFG, 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo Swainsoni*) in the Central Valley of California. California Department of Fish and Game.
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83992&inline>
- CDFG. 2012. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Game. March 7, 2012.
- California Department of Fish and Wildlife (CDFW), 2016. Five Year Status Review for Swainson's Hawk (*Buteo swainsoni*). California Department of Fish and Wildlife. April 11, 2016.
- CDFW, 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. California Department of Fish and Wildlife. March 20, 2018.
- CDFW, 2019. Approved Survey Methodology for the Blunt-nosed Leopard Lizard. California Department of Fish and Game, October 2019 (Revised).
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=174900&inline>
- CDFW, 2020. Biogeographic Information and Observation System (BIOS).
<https://www.wildlife.ca.gov/Data/BIOS>. Accessed July 13, 2020.
- California Native Plant Society, Rare Plant Program (CNPS). 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website
<http://www.rareplants.cnps.org>. Accessed July 14, 2020.
- Cypher, B. and N. Frost. 1999. Condition of San Joaquin kit foxes in urban and exurban habitats. *Journal of Wildlife Management* 63: 930-938.

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Cypher, B.L., S.E. Phillips, and P.A. Kelly. 2013. Quantity and distribution of suitable habitat for endangered San Joaquin kit foxes: conservation implications. *Canid Biology & Conservation* 16(7): 25-31.

Endangered Species Recovery Program (ESRP), 2020a. Blunt-nosed leopard lizard. <http://esrp.csustan.edu/speciesprofiles/profile.php?sp=gasi>. Accessed July 15, 2020.

ESRP, 2020b. Tipton kangaroo rat. <http://esrp.csustan.edu/speciesprofiles/profile.php?sp=dinin>. Accessed July 15, 2020.

ESRP, 2020c. Giant kangaroo rat. <http://esrp.csustan.edu/speciesprofiles/profile.php?sp=diin>. Accessed July 15, 2020.

ESRP, 2020d. Short-nosed kangaroo rat. <http://esrp.csustan.edu/speciesprofiles/profile.php?sp=dinib>. Accessed July 15, 2020.

ESRP, 2020e. San Joaquin antelope squirrel. <http://esrp.csustan.edu/speciesprofiles/profile.php?sp=amne>. Accessed July 15, 2020.

Estep, J. 2009. The influence of vegetation structure on Swainson's hawk (*Buteo swainsoni*) foraging habitat suitability in Yolo County, California. Prepared for the Yolo Natural Heritage Program, Woodland, CA.

Gervais, J. A., D. K. Rosenberg, and L. A. Comrack. 2008. Burrowing Owl (*Athene cunicularia*) In California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California (W. D. Shuford and T. Gardali, editors). *Studies of Western Birds* 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Gittleman, J. L., S. M. Funk, D. MacDonald, and R. K. Wayne, 2001. Carnivore conservation. Cambridge University Press, Cambridge, United Kingdom.

Hatfield, R, S. Colla, S. Jepsen, L. Richardson, R. Thorp, and S. Foltz Jordan. 2014. Draft IUCN Assessments for North American *Bombus* spp. for the North American IUCN Bumble Bee Specialist Group. The Xerces Society for Invertebrate Conservation, www.xerces.org, Portland, OR.

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- Hatfield, R., Jepsen, S., Thorp, R., Richardson, L. & Colla, S. 2015. *Bombus crotchii*. The IUCN Red List of Threatened Species. <http://dx.doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937582A46440211.en>. Accessed 16 August 2019.
- Thomson, R. C., A. N. Wright, and H. Bradley Shaffer, 2016. California Amphibian and Reptile Species of Special Concern. California Department of Fish and Wildlife and University of California Press: 84–92.
- Shuford, W. D. and T. Gardali (editors). 2008. California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California. Published by Western Field Ornithologists and California Department of Fish and Game.
- Swainson's Hawk Technical Advisory Committee (SWHA TAC), 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in the Central Valley of California. Swainson's Hawk Technical Advisory Committee. May 31, 2000.
- United States Fish and Wildlife Service (USFWS), 1998. Recovery Plan for Upland Species of the San Joaquin Valley, California. Region 1, Portland, OR. 319 pp. https://www.fws.gov/sacramento/es_species/Accounts/Mammals/giant_kangaroo_rat/documents/980930a.pdf
- USFWS. 2011. Standard Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance. United States Fish and Wildlife Service. January 2011.
- Williams, P. H., R. W. Thorp, L. L. Richardson, and S. R. Colla. 2014. Bumble bees of North America: An Identification guide. Princeton University Press, Princeton, New Jersey. 208pp.
- Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and Center for Food Safety. 2018. A petition to the state of California fish and game commission to list the Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and western bumble bee (*Bombus occidentalis occidentalis*) as Endangered under the California Endangered Species Act. October 2018.
- Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White, eds, 1988–1990d. Northern California legless lizard In Life history accounts for species in the California Wildlife Habitat Relationships (CWHR) System. California's Wildlife. Vol I-III. California Department of Fish and Game, Sacramento, California.

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Goulson, D. 2010. Bumblebees: behaviour, ecology, and conservation. Oxford University Press, New York. 317pp.

Attachment 1**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM
(MMRP)****PROJECT: Clean Harbors WMU Solid Waste Disposal Facility by
Clean Harbors Buttonwillow, LLC****State Clearinghouse No. 2020069034**

RECOMMENDED MITIGATION MEASURES	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
Recommended Mitigation Measure 1a: BNLL Habitat Assessment	
Recommended Mitigation Measure 1b: BNLL Surveys	
Recommended Mitigation Measure 2a: SJKF Habitat Assessment	
Recommended Mitigation Measure 2b: SJKF Surveys	
Recommended Mitigation Measure 2d: SJKF Take Authorization	
Recommended Mitigation Measure 3a: TKR, GKR, and SNKR Habitat Assessment	
Recommended Mitigation Measure 3b: TKR, GKR, and SNKR Surveys	
Recommended Mitigation Measure 3d: TKR and GKR Take Authorization	
Recommended Mitigation Measure 4a: SJAS Habitat Assessment	
Recommended Mitigation Measure 4b: SJAS Surveys	
Recommended Mitigation Measure 4d: SJAS Take Authorization	
Recommended Mitigation Measure 5a: Focused SWHA Surveys	
Recommended Mitigation Measure 5c: SWHA Take Authorization	
Recommended Mitigation Measure 5d: SWHA Foraging habitat compensation	
Recommended Mitigation Measure 5e: SWHA Tree Removal	

RECOMMENDED MITIGATION MEASURES	STATUS/DATE/INITIALS
Recommended Mitigation Measure 6a: Special-Status Plant Surveys	
Recommended Mitigation Measure 6b: Sensitive Natural Communities Survey	
Recommended Mitigation Measure 6e: Listed Plant Species Take Authorization	
Recommended Mitigation Measure 8a: BUOW Habitat Assessment	
Recommended Mitigation Measure 8b: BUOW Surveys	
Recommended Mitigation Measure 8d: BUOW Passive Relocation and Mitigation	
Recommended Mitigation Measure 9a: LL Surveys	
Recommended Mitigation Measure 10a: Habitat Assessment (Other Species of Special Concern)	
Recommended Mitigation Measure 10b: Surveys (Other Species of Special Concern)	
Recommended Mitigation Measure 11a: CDFW Consultation, Lokern Ecological Reserve	
Recommended Mitigation Measure 12a: Stream and Hydrological Features Mapping	
Recommended Mitigation Measure 12b: Stream and Riparian Habitat Mitigation	
<i>During Construction</i>	
Recommended Mitigation Measure 1c: BNLL Take Avoidance	
Recommended Mitigation Measure 2c: SJKF Take Avoidance	
Recommended Mitigation Measure 3d: TKR and GKR Take Avoidance	
Recommended Mitigation Measure 4c: SJAS Take Avoidance	
Recommended Mitigation Measure 5b: SWHA Take Avoidance	
Recommended Mitigation Measure 6c: Special-Status Plant Avoidance	
Recommended Mitigation Measure 7a: CBB Take Avoidance	
Recommended Mitigation Measure 8c: BUOW Avoidance	
Recommended Mitigation Measure 9b: LL Avoidance	
Recommended Mitigation Measure 10c: Avoidance (Other Species of Special Concern)	