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March 13, 2023

Mr. Dan Ruiz
Rancho California Water District
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Subject: Anza Road 1550 Pressure Zone Pipeline Extension Project, Mitigated Negative Declaration, SCH # 2023020255, Rancho California Water District, Riverside County

Dear Mr. Ruiz:

The California Department of Fish and Wildlife (CDFW) received a Mitigated Negative Declaration (MND) from the Rancho California Water District (District) for the Anza Road 1550 Pressure Zone Pipeline Extension Project (Project) for Ardurra Group, Inc. (Project Applicant/Proponent) 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, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

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

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.

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, including 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.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

CDFW issued Natural Community Conservation Plan approval and take authorization in 2004 for the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), as per Section 2800, et seq., of the California Fish and Game Code. The MSHCP established a multiple species conservation program to minimize and mitigate habitat loss and the incidental take of covered species in association with activities covered under the permit. CDFW is providing the following comments as they relate to the Project's consistency with the MSHCP and CEQA.

PROJECT DESCRIPTION AND SUMMARY

Description: The Rancho California Water District (District; Lead Agency) and Ardurra Group, Inc. (Project Applicant) are proposing the Anza Road 1550 Pressure Zone Pipeline Extension Project (Project). The proposed Project would extend the potable water pipeline approximately 1,050 linear feet, consisting of 725 linear feet of 12-inch and 325 linear feet of 24-inch diameter potable water pipeline, beginning at the end of Morgan Hill Drive to Anza Road using open trench and jack and bore construction.

In addition, approximately 45 linear feet of 24- inch casing will be utilized to install the pipeline where it passes under an unnamed jurisdictional wash. The casing construction will require the removal of approximately 120 cubic yards (CY) of excavated material (80 CY for jacking pit and 40 CY for receiving pit). Excavation of the trench will involve preparation of the trench, amending soil to fill the bottom of the trench, and backfilling the trench. In addition, approximately 560 CY of excavated material for the 12-inch pipeline and 450 CY of excavated material for the entire length of the 24-inch pipeline is required.

Location: The Project site is located north of Calle Linda, east of Anza Road, south of Highway 79 and west of Morgan Hill Road in unincorporated Riverside County, California, in Township 14 South, Range 2 West, of the U.S. Geological Survey 7.5" Pechanga, California topographic quadrangle map; Assessor's Parcel Numbers 966-170-003, 966-170-006, 966-170-022, and 966-170-040.

COMMENTS AND RECOMMENDATIONS

Based on the documents for review, CDFW offers the comments and recommendations below to assist the District in adequately identifying, avoiding, 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 are also be included to improve the environmental document. CDFW recommends the measures or revisions below be included in a science-based monitoring program that contains adaptive management strategies as part of the Project's CEQA mitigation, monitoring and reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097).

Western Riverside County Multiple Species Habitat Conservation Plan

Compliance with approved habitat plans, such as the MSHCP, is discussed in CEQA. Specifically, Section 15125(d) of the CEQA Guidelines requires that the CEQA document discuss any inconsistencies between a proposed project and applicable general plans and regional plans, including habitat conservation plans and natural community conservation plans. An assessment of the impacts to the MSHCP as a result of this Project is necessary to address CEQA requirements. The proposed Project occurs within the MSHCP area and is subject to the provisions and policies of the MSHCP.

The MND indicates that project activities associated would not conflict with the provisions of the MSHCP. Portions of the Project are adjacent to conserved lands, discussed further below. The MND should provide analysis that Project activities are consistent with MSHCP objectives. If there is potential for take of species or loss of habitat due to project implementation, then these impacts should be addressed. The District, as the lead agency, has the option of obtaining take of threatened and/or endangered species through the MSHCP or through a CESA Incidental Take Permit (ITP).

The District is the lead agency but is not signatory to the MSHCP; in order to participate in the MSHCP, the District would need to act as a Participating Special Entity (PSE) (see Section 6.1.6 Mitigation Responsibilities). To be considered a covered activity, Permittees need to demonstrate that proposed actions are consistent with the MSHCP, the Permits, and the Implementing Agreement. If the District chooses to act as a PSE and obtain take through the MSHCP, then the following MSHCP policies and procedures will apply to this project: Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (MSHCP Section 6.1.2), Protection of the Narrow Endemic Plant Species (MSHCP Section 6.1.3), Additional Survey Needs and Procedures (MSHCP section 6.3.2), and Urban/Wildland Interface Guidelines (MSHCP section 6.1.4).

The MSHCP identifies that the California Department of Fish and Wildlife and the U. S. Fish and Wildlife Service (collectively known as the Wildlife Agencies) shall be notified in advance of approval of public and private projects for the identified MSHCP activities

which includes the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools and Guidelines Pertaining to the Urban/Wildlands Interface (Section 6.11 of the MSHCP). CDFW recommends that to demonstrate compliance with the MSHCP, the District if the district chooses to be a PSE, then the District should complete the PSE process and MSHCP implementation prior to adoption of the MND for the Project.

If the Project is not processed through the MSHCP for covered species, then the Project may be subject to the Federal Endangered Species Act (FESA) and/or CESA for threatened, endangered, and/or candidate species. In order to evaluate potential for CESA species presence, recent, relevant survey results should be included in the MND. Impact assessment and mitigation development for permits developed after and outside of the CEQA process are not CEQA-compliant, because they deprive the public and agencies of their right to know of project impacts and how they are being mitigated (CEQA Section 15002). CDFW's CESA ITP requires that a project minimize and fully mitigate impacts to State-listed resources.

Regardless of whether take authorization of threatened and/or endangered species is obtained through the MSHCP or through a CESA ITP, the MND needs to address how the proposed Project will affect the policies and procedures of the MSHCP. Therefore, all surveys required by the MSHCP policies and procedures listed above to determine consistency with the MSHCP should be conducted and results included in the MND so that CDFW can adequately assess whether the Project will impact the MSHCP.

Specific Comments

Comment #1: Burrowing Owl

Issue: The Project may have a significant impact on burrowing owl (*Athene cunicularia),* a Species of Special Concern (SSC).

Specific impacts: Project construction and activities may result in injury or mortality of burrowing owl, disrupt natural burrowing owl breeding behavior, and reduce reproductive capacity. Also, the Project may impact breeding, wintering, and foraging habitat for the species. Habitat loss could result in local extirpation of the species and contribute to local, regional, and State-wide declines of burrowing owl.

Why impacts would occur: The MND and Appendix B identifies that protocol burrowing owl habitat surveys of the Project site were completed February 3, 2022 as described in the *2006 Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* and that no burrowing owls were seen or suitable habitat was found. No additional details (the survey dates, times, etc.) were provided regarding the burrowing owl surveys mentioned within the MND. The "Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area" specify a written report must be provided detailing results of the habitat assessment with photographs and indicating whether the project site contains suitable burrowing owl habitat and burrow locations.

There is insufficient information provided to determine if the proposed avoidance and minimization measures will mitigate Project impacts below a level of significance. BIO-MM#2 would require a no-work buffer around nesting birds, which would apply to occupied burrowing owl burrows, both during the nesting season and outside breeding season to be determined by the biologist. However, no-work buffer could be an insufficient buffer from occupied burrows and adjacent foraging grounds given the types of disturbance associated with the Project. Burrowing owls could react to low level disturbances such as surveys, drive by, or minimal ground disturbance/excavation (Environment Canada 2009). The Project is proposing a buffer that may be more suitable for low level disturbances; however, the Project could generate noise and ground vibrations more consistent with medium to high level disturbance. Project construction would generate noise and ground vibrations during daytime and nighttime earthmoving activities, demolition, tunneling, spoils hauling, and operation of large machinery. A buffer from occupied burrows during these types of disturbances could result in burrowing owls abandoning active nests, potentially causing loss of eggs or developing young, and noise could cause birds to avoid suitable nesting habitat. In addition, a buffer would not protect important foraging habitat during burrowing owl nesting season.

In addition, implementation of buffer “to the extent feasible” does not ensure that buffers will be required, which means that the mitigation proposed is not an enforceable requirement. Furthermore, CDFW’s 2012 Staff Report on Burrowing Mitigation (CDFG 2012) does not support relocating breeding burrowing owls as mitigation. Finally, CDFW does not issue permits for the take of nesting birds, nests, or eggs. BIO-MM#2 is not specific to burrowing owl and does not provide any performance standards suitable for successfully mitigating impacts on burrowing owl habitat. The mitigation measure proposed in the MND may not satisfy the CEQA standards for deferred mitigation (CEQA Guidelines, § 15126.4).

Evidence impact would be significant: Burrowing owl is a SSC, an SSC is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role;

- is listed as ESA-, but not CESA-, threatened, or endangered; meets the State definition of threatened or endangered but has not formally been listed;

- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; and/or,

- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for CESA

threatened or endangered status (CDFW 2022b). CEQA provides protection not only for ESA and CESA-listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for State listing. These SSC meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). In addition, migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). It is unlawful to take, possess, or needlessly destroy the nest or eggs of any raptor.

In California, burrowing owls are in decline primarily because of habitat loss, as well as disease, predation, and drought. Burrowing owls require specific soil and microhabitat conditions, occur in few locations within a broad habitat category of grassland and some forms of agricultural land, require a relatively large home range to support their life history requirements, occur in relatively low numbers, and are semi-colonial.

The Project's impact on burrowing owl has yet to be mitigated below a significant level. Accordingly, the Project continues to have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species by CDFW.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: To avoid take of active burrowing owl burrows (nests), CDFW requests the District include the following mitigation measures in the MND per below (edits are in ~~strikethrough~~ and **bold**), and also included in Attachment 1 "Mitigation Monitoring and Reporting Program".

MM-Bio XX: A 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities (e.g., vegetation clearing, clearing, and grubbing, grading, tree removal, site watering, equipment staging) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If ground-disturbing activities occur, but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure that burrowing owl have not colonized the site since it was last disturbed. A preconstruction survey for resident burrowing owls within 3 days prior to commencement shall also be conducted.

If burrowing owl are not detected during the pre-construction survey, no further mitigation is required. If burrowing owl are detected, CDFW shall be sent written notification within 3 days of

detection of burrowing owls. If active burrowing owl burrows are detected, the District shall not commence activities until no sign is present that the burrows are being used by adult or juvenile owls or following CDFW approval of a Burrowing Owl Plan as described below. If owl presence is difficult to determine, a qualified biologist shall monitor the burrows with motion-activated trail cameras for at least 24 hours to evaluate burrow occupancy. The onsite qualified biologist will verify the nesting effort has finished according to methods identified in the Burrowing Owl Plan.

The Burrowing Owl Plan shall be prepared in accordance with guidelines in the CDFW Staff Report on Burrowing Owl (March 2012) and MSHCP. The qualified biologist and Project Applicant shall coordinate with the District, CDFW, and US Fish and Wildlife Service (USFWS) to develop a Burrowing Owl Plan to be approved by the District, CDFW, and USFWS prior to commencing Project activities. The Burrowing Owl Plan shall describe proposed avoidance, relocation, monitoring, minimization, and/or mitigation actions. The Burrowing Owl Plan shall include the number and location of occupied burrow sites and details on proposed buffers if avoiding the burrowing owls or information on the adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated owls shall also be included in the Burrowing Owl Plan. The District shall implement the Burrowing Owl Plan following CDFW and USFWS review and approval.

If burrowing owls are observed within Project Site(s) during Project implementation and construction, the District shall notify CDFW immediately in writing within 48 hours of detection. A Burrowing Owl Plan shall be submitted to CDFW for review and approval within two weeks of detection and no Project activity shall continue within 1000 feet of the burrowing owls until CDFW approves the Burrowing Owl Plan. The District shall be responsible for implementing appropriate avoidance and mitigation measures, including burrow avoidance, passive or active relocation, or other appropriate mitigation measures as identified in the Burrowing Owl Plan.

If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a preconstruction survey for burrowing owl shall be conducted and reported to CDFW as described above. If a burrowing owl is found, the same coordination described above shall be necessary.

Comment #2: Crotch's Bumble Bee (*Bombus crotchii*)

Issue: The Project may impact State candidate species, Crotch's bumble bee (*Bombus crotchii*), through the removal of coastal sage brush and grassland communities.

Specific impacts: The Project may result in temporal and permanent loss of suitable nesting and foraging habitat for Crotch's bumble bee. Project ground-disturbing activities and vegetation removal may cause death or injury of adults, eggs, and larva, burrow collapse, nest abandonment, and reduced nest success.

Why impacts would occur: Crotch's bumble bees are generalist foragers and have been reported visiting a wide variety of flowering plants (Biesmeijer et al. 2006). They are known to occur in laurel sumac scrub, grassland, meadows, and coastal sage scrub, among other vegetation communities. Suitable Crotch's bumble bee habitat includes areas of grasslands and scrub that contain requisite habitat elements, such as small mammal burrows. Based on habitat and vegetation description in the MND and review of the property on Google Earth, it appears that suitable habitat for Crotch's bumblebee is present. However, surveys were not conducted as part of the MND nor were any measures for avoidance, minimization, or mitigation offered.

Crotch's bumble bee 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. 2018). Overwintering sites utilized by Crotch's bumble bee mated queens include soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014). Despite the presence of suitable Crotch's bumble bee habitat on site, the MND does not provide information as to what criteria would be used to conclude that the species is not present. Without adequate presence/absence surveys, ground disturbance and vegetation removal associated with Project implementation during the breeding season could result in the incidental loss of breeding success or otherwise lead to nest abandonment in areas adjacent to the Project site. Project activities may result in temporal or permanent loss of colonies, and suitable nesting and foraging habitat.

Evidence impact would be significant: A petition to list the Crotch's bumble bee, an endangered species under CESA, is currently pending before the California Fish and Game Commission (Commission) (Cal. Reg. Notice Register 2018, No. 45-Z, pp. 1986–1987 [November 9, 2018]). The Commission designated the Crotch's bumble bee as a candidate species under CESA in June 2019 (Cal. Reg. Notice Register 2019, No. 26-Z, pp. 954–955 [June 28, 2019]). The Commission's decision to designate the Crotch's bumble bee as a candidate species is the subject of a pending legal challenge (Almond Alliance of California v. Fish and Game Commission [2022] 79 Cal. App. 5th 337, pet. for review pending, S275412). On September 30th, 2022, candidacy was reinstated for the four bumble bee species petitioned for listing – Franklin's, Crotch's, western, and suckley cuckoo.

Crotch's bumble bee is listed as an invertebrate of conservation priority under the California Terrestrial and Vernal Pool Invertebrates of Conservation Priority (CDFWD 2017). Crotch's bumble bee has a State ranking of S1/S2. This means that the Crotch's bumble bee is considered critically imperiled or imperiled and is extremely rare (often 5 or fewer populations). Also, Crotch's bumble bee has a very restricted range and steep population declines make the species vulnerable to extirpation from the State (CDFW 2017). Accordingly, Crotch's bumble bee meets the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Therefore, take of Crotch's bumble bee could require a mandatory finding of significance by the District (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends that measures be taken, primarily, to avoid Project impacts to Crotch's bumble bee. Surveys should be performed by a qualified entomologist familiar with the species behavior and life history to determine the presence/absence of Crotch's bumble bee within one year prior to vegetation removal and/or grading. Surveys should be conducted during flying season when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983). Survey results, including negative findings, should be submitted to CDFW prior to implementing Project-related ground-disturbing activities. At minimum, a survey report should provide the following:

a) A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee. CDFW recommends the map show surveyor(s) track lines to document that the entire site was covered during field surveys.

b) Field survey conditions that should include name(s) of qualified entomologist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched.

c) Map(s) showing the location of nests/colonies.

d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species).

Recommendation #1: CDFW recommends the District update their CEQA document to reflect the possibility of Crotch's bumble bee within the Project site and discuss the local and regional significance of impacts to the species. Focus surveys should be conducted in order to determine presence/absence, identify potential nest sites, and to further evaluate the quality of habitat present for Crotch's bumble bee. The updated analysis

should include appropriate avoidance, minimization, and compensatory mitigation measures to offset any impacts to below a level of significance.

Comment #3: Impacts to Species of Special Concern

Issue: The Project identified a total of 36 special-status plant species, 44 special-status wildlife species, and one (1) special-status plant community as having potential to occur within the Pechanga quadrangle. However, CDFW is concerned that the proposed mitigation may not provide enough specificity to sufficiently avoid or minimize impacts to (SSC).

Specific impact: The MND and supporting Appendix B identify the Project site has a high potential to support Cooper's hawk (*Accipiter cooperii*), and sharp-shinned hawk (*Accipiter striatus*); and a low potential to support San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), loggerhead shrike (*Lanus ludovicianus*), California horned lark (*Eremophila alpestris actia*), northern harrier (*Circus cayaneu*) within the Project site. Direct impacts to SSC could result from Project construction and activities (e.g., equipment staging, mobilization, and grading); ground disturbance; vegetation clearing; and trampling or crushing from construction equipment, vehicles, and foot traffic. Indirect impacts could result from temporary or permanent loss of suitable habitat.

Why impacts would occur: Without appropriate species-specific avoidance measures, biological construction monitoring may be ineffective for detecting SSC. This may result in direct or indirect impacts to SSC. Demolition and paving after false negative conclusions may trap wildlife hiding under refugia and burrows. Project ground-disturbing activities such as grading and grubbing may result in habitat destruction, causing the death or injury of adults, juveniles, eggs, or hatchlings. In addition, the Project may remove habitat by eliminating native vegetation that may support essential foraging and breeding habitat.

Evidence impacts would be significant: CEQA provides protection not only for state and federally listed species, but for any species including but not limited to California Species of Special Concern which can be shown to meet the criteria for State listing. These Species of Special Concern meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15065). Take of SSC could require a mandatory finding of significance by the District (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure(s):

To address the above issues and help the Project applicant avoid unlawfully taking of nests and eggs, CDFW requests the District include the following mitigation measures in the MND per below (edits are in ~~strikethrough~~ and **bold**), and also included in Attachment 1 "Mitigation Monitoring and Reporting Program".

Mitigation Measure #1: Scientific Collecting Permit – The District/qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate

wildlife to avoid harm or mortality in connection with Project construction and activities.

Mitigation Measure #2: Species surveys – The District should retain a qualified biologist with experience surveying for each of the following species: Cooper's hawk, sharp-shinned hawk, San Diego black-tailed jackrabbit, loggerhead shrike, California horned lark, white-tailed kite, and northern harrier. Prior to commencing any Project-related ground-disturbing activities, the qualified biologist should conduct surveys for where suitable habitat is present. Project related activities include construction, equipment and vehicle access, parking, and staging. Focused surveys should consist of daytime surveys and nighttime surveys no more than one month from the start of any ground-disturbing activities. The surveys should include mapping of current locations of special-status wildlife species for avoidance and relocation efforts and to assist construction monitoring efforts. The survey should be conducted so that 100 percent coverage of the project site and surrounding areas is achieved.

If SSC are detected, the qualified biologist should use visible flagging to mark the location where SSC was detected. The qualified biologist should take a photo of each location, map each location, and provide the specific species detected at that location. The qualified biologist should provide a summary report of SSC surveys to the District before any Project-related ground-disturbing activities. The CDFW should be notified and consulted regarding the presence of any special-status wildlife species found on site during surveys. If an Endangered Species Act-listed species is found prior to or during grading of the site, the USFWS should also be notified. Additional avoidance and minimization measures may need to be developed with CDFW/USFW.

Mitigation Measure #3: Protection/Relocation Plan – Where applicable, wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to adjacent appropriate habitat within the open space on site or in suitable habitat adjacent to the project area (either way, at least 200 feet from the grading limits). Special status wildlife should be captured by only by a qualified biologist with proper handling permits. The qualified biologist should prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. The list (or plan) of protocols should be implemented during project construction and activities/biological construction monitoring. The District/qualified biologist may consult with CDFW/USFWS to prepare species-specific protocols for proper handling and relocation procedures. Only a USFWS approved biologist should be authorized to capture and relocate ESA-listed species. A relocation plan should be submitted to CDFW for review and comment prior to implementing Project-related ground-disturbing activities.

Mitigation Measure #4: Worker Training – The District in consultation with a qualified biologist should prepare worker environmental awareness training prior to implementation of Project ground-disturbing activities. The training should include effective, specific, enforceable, and feasible actions. The qualified biologist should have prepared maps showing locations where SSC were detected and share this information

to workers as part of training. The qualified biologist shall meet with the construction crew at the project site at the onset of construction to educate the construction crew on the following: 1) a review of the project boundaries; 2) all special-status species that may be present, their habitat, and proper identification; and 3) the specific mitigation measures that will be incorporated into the construction effort. The qualified biologist should communicate to workers that upon encounter with a SSC, work must stop, a qualified biologist must be notified, and work may only resume once a qualified biologist has determined that it is safe to do so. Any contractor or employee that inadvertently kills or injures a special-status animal, or finds one either dead, injured, or entrapped, should immediately report the incident to the qualified biologist and/or onsite representative identified in the worker training.

Mitigation Measure #5: Monitoring Frequency – Pre-construction surveys should be conducted no more than one week prior to initial Project-related ground-disturbing activities. Surveys for American badgers should occur no more than three days prior to activities. Afterward, the District should contract with a biologist to conduct periodic, but no less than weekly, biological monitoring so as to assist in avoiding and minimizing impacts to special-status wildlife. Daily biological monitoring should be conducted during any activities involving vegetation clearing or modification of natural habitat. Surveys for SSC should be conducted prior to the initiation of each day of vegetation removal activities in suitable habitat. Surveys for SSC should be conducted in the areas flagged in earlier surveys before construction and activities may occur in or adjacent to those areas. Work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, workers should be advised to work with caution near flagged areas. If SSC is encountered, qualified biologist should safely protect or relocate the animal per relocation and handling protocols.

Mitigation Measure #6: Injured or Dead Wildlife – If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area should stop immediately, the qualified biologist should be notified, and dead or injured wildlife documented immediately. The qualified biologist should contact the USFWS, CDFW, and the District by telephone by the end of the day, or at the beginning of the next working day if the agency office is closed. In addition, a formal report should be sent to the District, CDFW, and USFWS (as appropriate) within three calendar days of the incident or finding. The report should include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.

Comment #4: Nesting Bird

Issue: The Project may have a significant impact on nesting birds, including Species of Special Concern and fully protected species, that are subject to Fish and Game Code section 3513 and the Migratory Bird Treaty Act of 1918.

Specific impact: Project implementation could result in the loss of nesting and/or foraging habitat for passerine and raptor species from the removal of vegetation onsite.

Why impacts would occur: Project activities could result in temporary or long-term loss of suitable nesting and foraging habitats. Construction during the breeding season of nesting birds could potentially result in the incidental loss of breeding success or otherwise lead to nest abandonment. Noise from road use, generators, and heavy equipment may disrupt nesting bird mating calls or songs, which could impact reproductive success (Patricelli and Blickley 2006, Halfwerk et al. 2011). Noise has also been shown to reduce the density of nesting birds (Francis et al. 2009), and songbird abundance and density was significantly reduced in areas with high levels of noise (Bayne et al. 2008). Additionally, noise exceeding 70 dB(A) may affect feather and body growth of young birds (Kleist et al. 2018). In addition to construction activities, residential development and increased human presence in the Project site could contribute to nesting bird impacts.

The timing of the nesting season varies greatly depending on several factors, such as the bird species, weather conditions in any given year, and long-term climate changes (e.g., drought, warming, etc.). CDFW staff have observed that changing climate conditions may result in the nesting bird season occurring earlier and later in the year than historical nesting season dates. CDFW recommends the completion of nesting bird survey regardless of time of year to ensure compliance with all applicable laws pertaining to nesting and to avoid take of nests.

The duration of a pair to build a nest and incubate eggs varies considerably, therefore, CDFW recommends surveying for nesting behavior and/or nests and construction within three days prior to start of Project construction to ensure all nests on site are identified and to avoid take of nests. Without appropriate species-specific avoidance measures, biological construction monitoring may be ineffective for detecting nesting birds. This may result in Take of nesting birds. Project ground-disturbing activities such as grading and grubbing may result in habitat destruction, causing the death or injury of adults, juveniles, eggs, or hatchlings. In addition, the Project may remove habitat by eliminating native vegetation that may support essential foraging and breeding habitat.

Evidence impacts would be significant: It is the Project proponent's responsibility to avoid Take of all nesting birds. Fish and Game Code section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.). Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) to take, possess, or destroy the nest or eggs of any such bird except as otherwise

provided by Fish and Game Code or any regulation adopted pursuant thereto. These regulations apply anytime nests or eggs exist on the Project site.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: To address the above issues and help the Project applicant avoid unlawfully taking of nesting birds, CDFW requests the District include the following mitigation measures in the MND per below (edits are in ~~strikethrough~~ and **bold**), and also included in Attachment 1 "Mitigation Monitoring and Reporting Program.

MM-Bio-01: Nesting Bird ~~Clearance~~ Survey: In order to protect migratory bird species, the Rancho California Water District (District) shall hire a qualified wildlife biologist to conduct a nesting bird ~~clearance~~ survey which shall be conducted within 3-days of the start of any ground disturbance or vegetation removal activities that may disrupt the birds ~~during the nesting season.~~ **A pre-activity field survey shall be conducted prior to the issuance of grading permits for such project to determine if active nests of species protected by the MBTA or the California Fish and Game Code are present in the construction zone in addition to ongoing monitoring, and if necessary, establishment of minimization measures. The Project Applicant shall adhere to the following:**

1. **The biologist (Designated Biologist) shall be experienced in: identifying local and migratory bird species of special concern; conducting bird surveys using appropriate survey methodology; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and nest success; determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures.**

MM-Bio-02: Pre-construction Nesting Bird Survey: **Site preparation activities (ground disturbance, construction activities, and/or removal of trees and vegetation) for all Project activities shall be avoided, to the greatest extent possible, during the nesting season of potentially occurring nesting species. Additionally, raptors (birds of prey) are known to begin nest building in January or February. If vegetation clearing is to occur between January 1 and February 15, a nesting raptor survey shall be conducted within the project site, including a 500-foot buffer, no more than three days prior to vegetation removal.** If ~~construction~~ **site preparation activities** occurs ~~between February 1st and August 31st~~ **during the nesting/breeding season**, the District shall verify that a pre-construction clearance survey for nesting birds should be conducted within three (3) days

of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. ~~according to the following:~~ **The pre-activity field survey shall be conducted by a qualified biologist (as described in MM-Bio-01) prior to the issuance of grading permits for such project to determine if active nests of species protected by the MBTA or the California Fish and Game Code are present in the construction zone in addition to ongoing monitoring, and if necessary, establishment of minimization measures. The Project Applicant shall adhere to the following:**

1. **Pre-activity field surveys shall be conducted at the appropriate time of day/night, during appropriate weather conditions, no more than 3 days prior to the initiation of Project activities. Surveys shall encompass all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration shall take into consideration the size of the Project site; density, and complexity of the habitat; number of survey participants; survey techniques employed; and shall be sufficient to ensure the data collected is complete and accurate.**

2. The District shall verify that plans, specifications and estimates for the Project include a note requiring a pre-construction nesting survey three days before construction and that any reports, including monitoring reports, are retained on site by the Construction Manager.

~~2. The District shall document that the biologist conducting the clearance survey reports a negative survey with a brief letter report indicating that no impacts to active avian nests are expected.~~

If active nests are not located within the implementing project site, no biological monitor is needed. If an active avian nest is discovered during the pre-construction clearance survey, ~~construction activities should stay outside of a no-disturbance buffer~~ **the following measures shall be implemented** and documentation of the following shall be retained on site by the Construction Manager.

a. Construction personnel will be instructed by the biologist on the sensitivity of nest areas.

b. The size of the no-disturbance buffer will be determined by the wildlife biologist **immediately based on their best professional judgement and experience and** will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and

topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances**. A minimum buffer of 500 feet around an active listed species or raptor nest, 300 feet around active passerine (perching birds or songbirds), sensitive, or protected bird nests (non-listed), or 1000 feet of sensitive or protected songbird nests. No construction activity shall occur within the buffer area until a qualified biologist determines nesting species have fledged and the nest is no longer active or the nest has failed.**

c. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers installed under biologist supervision.

d. The biologist monitoring construction should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. **The Designated Biologist shall monitor the nest at the onset of project activities, and at the onset of any changes in such project activities (e.g., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficacy of the buffer. If the Designated Biologist determines that such project activities may be causing an adverse reaction, the Designated Biologist shall adjust the buffer accordingly or implement alternative avoidance and minimization measures, such as redirecting or rescheduling construction or erecting sound barriers. All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The onsite qualified biologist will review and verify compliance with these nesting avoidance buffers and will verify the nesting effort has finished.**

e. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur. **Upon completion of the survey and nesting bird monitoring, a report shall be prepared and submitted to the District for mitigation monitoring compliance record keeping.**

Comment #5: Impacts to Aquatic and Riparian Resources; Lake and Streambed Alteration Agreement (LSAA)

Issue: Based on review of material submitted with the MND and review of aerial photography the Project has the potential to impact fish and wildlife resources subject to Fish and Game Code section 1600 et seq.

Specific Impact: The MND identified a stream subject to Fish and Game Code section 1600 along the eastern portion of the proposed alignment and is directly connected to Temecula Creek, generally flowing in a south to north direction. Based on the proposed design, a jack and bore method will be used to install the pipeline under the drainage at the Project Site. While the MND and Appendix B state that the stream will be avoided, the Project activities have the potential to impact fish and wildlife resources through the deposition of debris, waste or other materials that could pass into any river, stream, or lake.

Why Impact Would Occur: Project-related activities could potentially alter drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site. The horizontal directional drilling process uses the flow of drilling slurry (typically a mix of bentonite and water) to remove drill cuttings from the borehole, stabilize the walls of the borehole and prevent borehole collapse, and to cool and lubricate the drilling bit (New Jersey Department of Environmental Protection 2021). One of the main concerns associated with horizontal directional drilling is the risk of inadvertent returns and drilling mud leakage into the soil and nearby bodies of surface and groundwater (Slade 1998; George Washington National Forest 2021). Drilling mud, which is classified as a contaminant by the Clean Water Act when released, has the potential to negatively impact freshwater ecosystems by increasing water turbidity, altering overall water chemistry, and introducing detrimental chemicals to plants and animals that could cause injury (Slade 1998; Kwast-Kotlarek et al. 2018; Tetra Tech Incorporated 2016; Lubrecht 2012).

Evidence Impact Would Be Significant: The Project may substantially adversely affect the existing stream pattern and geomorphologic processes of the Project site through the deposition of debris, waste or other materials that could pass into any river, stream or lake. Depending on how the Project is designed and constructed, it is likely that the Project applicant will need to notify CDFW per Fish and Game Code section 1602. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that “any river, stream or lake” includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round).

This includes ephemeral streams, desert washes, and watercourses with a subsurface flow.

Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify the project that would eliminate or reduce harmful impacts to fish and wildlife resources.

CDFW's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code, § 21065). To facilitate issuance of an LSA Agreement, if necessary, the MND should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to https://www.wildlife.ca.gov/Conservation/LSA/Forms.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: To ensure compliance with Fish and Game Code section 1602 CDFW recommends that the District condition the MND to include a mitigation measure for consultation with CDFW to determine if Fish and Game Code section 1600 et seq. resources may occur within the proposed Project alignment.

CDFW recommends the inclusion of the following measure in the MND per the edits below (edits are in ~~strikethrough~~ and **bold**), and also included in Attachment 1 "Mitigation Monitoring and Reporting Program":

> **MM BIO-XX: Prior to the grading the Project site and prior to the start of Project activities, the Applicant shall notify the California Department of Fish and Wildlife (CDFW) for impacts to Fish and Game Code section 1602 resources. The applicant shall either receive a Streambed Alteration Agreement or written documentation from CDFW that a Streamed Alteration Agreement is not needed.**
>
> **MM BIO-04**: Jurisdictional Delineation for Waters of the State and Waters of the United States: To ensure compliance with jurisdictional delineation pursuant to U.S. Army Corps of Engineers, **and** Regional Water Quality Control Board~~, and California Department of Fish and Wildlife~~ requirements, the District shall forward the Delineation of State and Federal Jurisdictional Water Report conducted by ELMT, to these regulatory agencies for their review and concurrence prior to start of construction. The District shall keep the concurrence receipt on file in the District Offices in the administrative record.

Comment #6: Urban/Wildlands Interface Guidelines

Issue: The Project site identified in the MND is located immediately south of land placed in long-term conservation under the MSHCP along Temecula Creek that is owned by the Western Riverside County Regional Conservation Authority.

Specific Impact: The Project site is located immediately south of land placed in long-term conservation for the establishment of Proposed Constrained Linkage 24 within Temecula and Pechanga Creeks Subunit 2. The MND states that proposed project will be confined to existing areas that have been heavily disturbed and planned for urbanization; however, the impacts to conserved land is not discussed in the MND.

Why Impact Would Occur: Proposed land uses adjacent to the MSHCP Conservation Area can result in harmful effects from drainage, toxics, lighting, noise, invasives, barriers, and grading/land development. CDFW is concerned about trespass onto the Conservation Area from unauthorized uses which can lead to habitat loss and degradation, increase fire hazards, increased predation, and spread of invasive species. The Planning Species for the Temecula and Pechanga Creeks Subunit 2 include many avian species, including Cooper's hawk, downy woodpecker, least Bell's vireo, loggerhead shrike, southwestern willow flycatcher, tree swallow, white-tailed kite, yellow-breasted chat.

Any artificial lighting that may be used during Project activities and the resulting light pollution alter ecological processes including, but not limited to, the temporal niches of species; the repair and recovery of physiological function; the measurement of time through interference with the detection of circadian and lunar and seasonal cycles; and the detection of resources and natural enemies and navigation (Gatson et al. 2013). Many species use photoperiod cues for communication (e.g., bird song; Miller 2006), determining when to begin foraging (Stone et al. 2009), behavior thermoregulation (Beiswenger 1977), and migration (Longcore and Rich 2004). Phototaxis, a phenomenon which results in attraction and movement towards light, can disorient, entrap, and temporarily blind wildlife species that experience it (Longcore and Rich 2004). Further, many of the effects of artificial nighttime lightning on population- or ecosystem-level processes are still poorly known.

CDFW is also concerned about the potential impacts of runoff from the proposed Project site on the surrounding area and Temecula Creek watershed. Increased nitrogen deposition into wetland systems has been shown to cause systems to become more eutrophic and cause increased frequency of harmful algal blooms in aquatic systems. Environmental factors (such as climate change) and the addition of excess nitrogen has been shown to alter the soil's physical and chemical properties, microbial diversity, and key carbon and nitrogen cycling genes in wetlands (Yin et al. 2022). In addition, correlations have been documented between nitrogen enrichment in waters and pathogen abundance and diseases of both humans and wildlife (Johnson et al. 2010). The MND should address Project-related changes on drainage patterns and

water quality within, upstream, and downstream of the Project site, including but not limited to: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.

Evidence Impact Would Be Significant: As the MSHCP Conservation Area is assembled, boundaries are established between development and MSHCP Conservation Areas. Development near the MSHCP Conservation Area may result in edge effects that will adversely affect biological resources within the MSHCP Conservation Area. To minimize edge effects and maintain conservation values within the Conservation Areas, the District is required to implement the Urban/Wildlands Interface Guidelines (MSHCP Section 6.1.4) to minimize harmful effects from drainage, toxics, lighting, noise, invasives, barriers, and grading/land development. The MSHCP identifies that Project review and impact mitigation be provided through the CEQA process to address the Urban/Wildland Interface guidelines.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends that the MND include an analysis of edge effects related to project construction and operation, such as noise, lighting, trespass, and toxics and that Project specific mitigation measures to avoid and minimize any effects be included in the updated MND. Avoidance and minimization measures can include, but are not limited to:

1. *Lighting Plan*: A Lighting Plan that identifies existing ambient lighting conditions, analyzes the Project lighting impacts on the adjacent Conservation Area, and demonstrates that the proposed lighting plan will not significantly increase the lighting on the Conservation Area. The Lighting Plan should identify measures that address light and glare from interior and exterior building lighting, safety and security lighting, and vehicular traffic accessing the site at a minimum.

2. *Noise Plan*: A Noise Plan to avoid and minimize noise impacts based on an assessment of Project noise impacts on adjacent conservation areas during construction and post development. The MSHCP identifies that Project noise impacts do not exceed the residential standards within the Conservation Areas.

3. *Landscaping Plan*: A Landscaping plan that includes the use of native plant material on the Project site and avoids the use of invasive plant species identified in Table 6-2 of the MSHCP.

4. *Fencing Plan*: A Barrier and Fencing plan that provides specific details designed to minimize unauthorized public access, domestic animal predation, illegal trespass, and dumping in the MSHCP Conservation Area (such as block walls along areas directly adjacent to potential conservation areas) and

5. *Best Management Practice*s: The MND should incorporate the guidance in MSHCP Section 7.0 and Appendix C of the MSHCP for addressing Best Management Practices.

Additional Recommendations

Weed Management Plan. A weed management plan should be developed for the Project site and implemented during the duration of this long-term Project. On-going soil disturbance promotes establishment and growth of non-native weeds. As part of the Project, non-native weeds should be prevented from becoming established. The Projects site should be monitored via mapping for new introductions and expansions of non-native weeds.

Mitigation and Monitoring Reporting Plan

CDFW recommends updating the MND's proposed Biological Resources Mitigation Measures to include mitigation measures recommended in this letter. Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally binding instruments [(Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15126.4(a)(2)]. As such, CDFW has provided comments and recommendations to assist the District in developing mitigation measures that are (1) consistent with CEQA Guidelines section 15126.4; (2) specific; (3) detailed (i.e., responsible party, timing, specific actions, location), and (4) clear for a measure to be fully enforceable and implemented successfully via mitigation, monitoring, and/or reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097). The District is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided the District with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment 1).

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, 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 MND for the Anza Road 1550 Pressure Zone Pipeline Extension Project, State Clearinghouse No. 2023020255 to assist in identifying and mitigating Project impacts on biological resources. CDFW personnel are available for consultation regarding biological resources and strategies to minimize impacts. CDFW requests that the Rancho California Water District addresses CDFW's comments and concerns prior to adoption of the MND for the Project.

Questions regarding this letter or further coordination should be directed to Katrina Rehrer, Environmental Scientist, at katrina.rehrer@wildlife.ca.gov.

Sincerely,

DocuSigned by:
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84F92FFEEFD24C8...

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Attachment A: Draft Mitigation and Monitoring Reporting Plan

CDFW recommends the following language to be incorporated into a future environmental document for the Project. A final MMRP shall reflect results following additional plant and wildlife surveys and the Project's final on and/or off-site mitigation plans.

Biological Resources (BIO)			
Mitigation Measure (MM)		**Timing**	**Responsible Party**
Burrowing Owl	MM BIO-XX: A 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities (e.g., vegetation clearing, clearing, and grubbing, grading, tree removal, site watering, equipment staging) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If ground-disturbing activities occur, but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure that burrowing owl have not colonized the site since it was last disturbed. A preconstruction survey for resident burrowing owls within 3 days prior to commencement shall also be conducted. If burrowing owl are not detected during the pre-construction survey, no further mitigation is required. If burrowing owl are detected, CDFW shall be sent written notification within 3 days of detection of burrowing owls. If active burrowing owl burrows are detected, the District shall not commence activities until no sign is present that the burrows are being used by adult or juvenile owls or following CDFW approval of a Burrowing Owl Plan as described below. If owl presence is difficult to determine, a qualified biologist shall monitor the	Prior to commencing ground- or vegetation disturbing activities	Project Proponent

	burrows with motion-activated trail cameras for at least 24 hours to evaluate burrow occupancy. The onsite qualified biologist will verify the nesting effort has finished according to methods identified in the Burrowing Owl Plan. The Burrowing Owl Plan shall be prepared in accordance with guidelines in the CDFW Staff Report on Burrowing Owl (March 2012) and MSHCP. The qualified biologist and Project Applicant shall coordinate with the District, CDFW, and US Fish and Wildlife Service (USFWS) to develop a Burrowing Owl Plan to be approved by the District, CDFW, and USFWS prior to commencing Project activities. The Burrowing Owl Plan shall describe proposed avoidance, relocation, monitoring, minimization, and/or mitigation actions. The Burrowing Owl Plan shall include the number and location of occupied burrow sites and details on proposed buffers if avoiding the burrowing owls or information on the adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated owls shall also be included in the Burrowing Owl Plan. The District shall implement the Burrowing Owl Plan following CDFW and USFWS review and approval. If burrowing owls are observed within Project Site(s) during Project implementation and construction, the District shall notify CDFW immediately in writing within 48 hours of detection. A Burrowing Owl Plan shall be submitted to CDFW for review and approval within two weeks of detection and no Project activity shall continue within 1000 feet of the		

	burrowing owls until CDFW approves the Burrowing Owl Plan. The District shall be responsible for implementing appropriate avoidance and mitigation measures, including burrow avoidance, passive or active relocation, or other appropriate mitigation measures as identified in the Burrowing Owl Plan. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a preconstruction survey for burrowing owl shall be conducted and reported to CDFW as described above. If a burrowing owl is found, the same coordination described above shall be necessary.		
Crotch's Bumble Bee	**Mitigation Measure #1:** CDFW recommends that measures be taken, primarily, to avoid Project impacts to Crotch's bumble bee. Surveys should be performed by a qualified entomologist familiar with the species behavior and life history to determine the presence/absence of Crotch's bumble bee within one year prior to vegetation removal and/or grading. Surveys should be conducted during flying season when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983). Survey results, including negative findings, should be submitted to CDFW prior to implementing Project-related ground-disturbing activities. At minimum, a survey report should provide the following: a) A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee. CDFW recommends the map show surveyor(s) track lines to document that the	Prior to finalizing CEQA document	Rancho California Water District/ Project Applicant

	entire site was covered during field surveys. b) Field survey conditions that should include name(s) of qualified entomologist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched. c) Map(s) showing the location of nests/colonies. d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species).		
Species of Special Concern	**MM BIO-XX: Scientific Collecting Permit** – The District/qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities.	Prior to finalizing CEQA document	Rancho California Water District/ Project Applicant
Species of Special Concern	**MM BIO-XX: Species surveys** – The District should retain a qualified biologist with experience surveying for each of the following species: Cooper's hawk, sharp-shinned hawk, San Diego black-tailed jackrabbit, loggerhead shrike, California horned lark, white-tailed kite, and northern harrier. Prior to commencing any Project-related ground-disturbing activities,	Prior to finalizing CEQA document	Rancho California Water District/ Project Applicant

	the qualified biologist should conduct surveys for where suitable habitat is present. Project related activities include construction, equipment and vehicle access, parking, and staging. Focused surveys should consist of daytime surveys and nighttime surveys no more than one month from the start of any ground-disturbing activities. The surveys should include mapping of current locations of special-status wildlife species for avoidance and relocation efforts and to assist construction monitoring efforts. The survey should be conducted so that 100 percent coverage of the project site and surrounding areas is achieved. If SSC are detected, the qualified biologist should use visible flagging to mark the location where SSC was detected. The qualified biologist should take a photo of each location, map each location, and provide the specific species detected at that location. The qualified biologist should provide a summary report of SSC surveys to the District before any Project-related ground-disturbing activities. The CDFW should be notified and consulted regarding the presence of any special-status wildlife species found on site during surveys. If an Endangered Species Act-listed species is found prior to or during grading of the site, the USFWS should also be notified. Additional avoidance and minimization measures may need to be developed with CDFW/USFW.		
Species of Special Concern	**MM BIO-XX: Protection/Relocation Plan** – Where applicable, wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to adjacent appropriate habitat within the open space on site or in suitable habitat adjacent to the project	Prior to finalizing CEQA document	Rancho California Water District/ Project Applicant

	area (either way, at least 200 feet from the grading limits). Special status wildlife should be captured by only by a qualified biologist with proper handling permits. The qualified biologist should prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. The list (or plan) of protocols should be implemented during project construction and activities/biological construction monitoring. The District/qualified biologist may consult with CDFW/USFWS to prepare species-specific protocols for proper handling and relocation procedures. Only a USFWS approved biologist should be authorized to capture and relocate ESA-listed species. A relocation plan should be submitted to CDFW for review and comment prior to implementing Project-related ground-disturbing activities.		
Species of Special Concern	**MM BIO-XX: Worker Training** – The District in consultation with a qualified biologist should prepare worker environmental awareness training prior to implementation of Project ground-disturbing activities. The training should include effective, specific, enforceable, and feasible actions. The qualified biologist should have prepared maps showing locations where SSC were detected and share this information to workers as part of training. The qualified biologist shall meet with the construction crew at the project site at the onset of construction to educate the construction crew on the following: 1) a review of the project boundaries; 2) all special-status species that may be present, their habitat, and proper identification; and 3) the specific mitigation measures that will be incorporated into the construction effort. The qualified biologist should communicate to workers that upon encounter with a SSC,	Prior to finalizing CEQA document	Rancho California Water District/ Project Applicant

	work must stop, a qualified biologist must be notified, and work may only resume once a qualified biologist has determined that it is safe to do so. Any contractor or employee that inadvertently kills or injures a special-status animal, or finds one either dead, injured, or entrapped, should immediately report the incident to the qualified biologist and/or onsite representative identified in the worker training.		
Species of Special Concern	**MM BIO-XX: Monitoring Frequency** – Pre-construction surveys should be conducted no more than one week prior to initial Project-related ground-disturbing activities. Surveys for American badgers should occur no more than three days prior to activities. Afterward, the District should contract with a biologist to conduct periodic, but no less than weekly, biological monitoring so as to assist in avoiding and minimizing impacts to special-status wildlife. Daily biological monitoring should be conducted during any activities involving vegetation clearing or modification of natural habitat. Surveys for SSC should be conducted prior to the initiation of each day of vegetation removal activities in suitable habitat. Surveys for SSC should be conducted in the areas flagged in earlier surveys before construction and activities may occur in or adjacent to those areas. Work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, workers should be advised to work with caution near flagged areas. If SSC is encountered, qualified biologist should safely protect or relocate the animal per relocation and handling protocols.	Prior to finalizing CEQA document	Rancho California Water District/ Project Applicant

Species of Special Concern	**MM BIO-XX: Injured or Dead Wildlife** – If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area should stop immediately, the qualified biologist should be notified, and dead or injured wildlife documented immediately. The qualified biologist should contact the USFWS, CDFW, and the District by telephone by the end of the day, or at the beginning of the next working day if the agency office is closed. In addition, a formal report should be sent to the District, CDFW, and USFWS (as appropriate) within three calendar days of the incident or finding. The report should include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.	Prior to finalizing CEQA document	Rancho California Water District/ Project Applicant
Nesting Birds	**MM-Bio-01: Nesting Bird Survey:** In order to protect migratory bird species, the Rancho California Water District (District) shall hire a qualified wildlife biologist to conduct a nesting bird survey which shall be conducted within 3-days of the start of any ground disturbance or vegetation removal activities that may disrupt the birds A pre-activity field survey shall be conducted prior to the issuance of grading permits for such project to determine if active nests of species protected by the MBTA or the California Fish and Game Code are present in the construction zone in addition to ongoing monitoring, and if necessary, establishment of minimization measures. The Project Applicant shall adhere to the following:	Prior to commencing ground- or vegetation disturbing activities	Project Proponent

	1. The biologist (Designated Biologist) shall be experienced in: identifying local and migratory bird species of special concern; conducting bird surveys using appropriate survey methodology; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and nest success; determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures.		
Nesting Birds	**MM-Bio-02: Pre-construction Nesting Bird Survey:** Site preparation activities (ground disturbance, construction activities, and/or removal of trees and vegetation) for all Project activities shall be avoided, to the greatest extent possible, during the nesting season of potentially occurring nesting species. Additionally, raptors (birds of prey) are known to begin nest building in January or February. If vegetation clearing is to occur between January 1 and February 15, a nesting raptor survey shall be conducted within the project site, including a 500-foot buffer, no more than three days prior to vegetation removal. If site preparation activities occurs during the nesting/breeding season, the District shall verify that a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The pre-activity field survey shall be conducted by a qualified biologist (as described in MM-Bio-01) prior to the issuance of grading permits for such project to determine if active nests of	Prior to commencing ground- or vegetation disturbing activities	Project Proponent

	species protected by the MBTA or the California Fish and Game Code are present in the construction zone in addition to ongoing monitoring, and if necessary, establishment of minimization measures. The Project Applicant shall adhere to the following: **1.** Pre-activity field surveys shall be conducted at the appropriate time of day/night, during appropriate weather conditions, no more than 3 days prior to the initiation of Project activities. Surveys shall encompass all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration shall take into consideration the size of the Project site; density, and complexity of the habitat; number of survey participants; survey techniques employed; and shall be sufficient to ensure the data collected is complete and accurate. **2.** The District shall verify that plans, specifications and estimates for the Project include a note requiring a pre-construction nesting survey three days before construction and that any reports, including monitoring reports, are retained on site by the Construction Manager. If active nests are not located within the implementing project site, no biological monitor is needed. If an active avian nest is discovered during the pre-construction clearance survey, the following measures shall be implemented and documentation of the following shall be retained on site by the Construction Manager.		

	a. Construction personnel will be instructed by the biologist on the sensitivity of nest areas. b. The size of the no-disturbance buffer will be determined by the wildlife biologist immediately based on their best professional judgement and experience and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. A minimum buffer of 500 feet around an active listed species or raptor nest, 300 feet around active passerine (perching birds or songbirds), sensitive, or protected bird nests (non-listed), or 1000 feet of sensitive or protected songbird nests. No construction activity shall occur within the buffer area until a qualified biologist determines nesting species have fledged and the nest is no longer active or the nest has failed. c. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers installed under biologist supervision. d. The biologist monitoring construction should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. The Designated Biologist shall monitor the		

	nest at the onset of project activities, and at the onset of any changes in such project activities (e.g., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficacy of the buffer. If the Designated Biologist determines that such project activities may be causing an adverse reaction, the Designated Biologist shall adjust the buffer accordingly or implement alternative avoidance and minimization measures, such as redirecting or rescheduling construction or erecting sound barriers. All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The onsite qualified biologist will review and verify compliance with these nesting avoidance buffers and will verify the nesting effort has finished. e. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur. Upon completion of the survey and nesting bird monitoring, a report shall be prepared and submitted to the District for mitigation monitoring compliance record keeping.		
Impacts to Aquatic and Riparian Resources	**MM BIO-XX:** Prior to the grading the Project site and prior to the start of Project activities, the Applicant shall notify the California Department of Fish and Wildlife (CDFW) for impacts to Fish and Game Code section 1602 resources. The applicant shall either receive a Streambed Alteration	Prior to ground disturbing activities and vegetation removal	Project Applicant

	Agreement or written documentation from CDFW that a Streamed Alteration Agreement is not needed.		
Impacts to Aquatic and Riparian Resources	**MM BIO-04:** Jurisdictional Delineation for Waters of the State and Waters of the United States: To ensure compliance with jurisdictional delineation pursuant to U.S. Army Corps of Engineers, and Regional Water Quality Control Board requirements, the District shall forward the Delineation of State and Federal Jurisdictional Water Report conducted by ELMT, to these regulatory agencies for their review and concurrence prior to start of construction. The District shall keep the concurrence receipt on file in the District Offices in the administrative record.	Prior to ground disturbing activities and vegetation removal	Project Applicant
Urban/ Wildlands Interface Guidelines	**MM BIO-XX:** CDFW recommends that the MND include an analysis of edge effects related to project construction and operation, such as noise, lighting, trespass, and toxics and that Project specific mitigation measures to avoid and minimize any effects be included in the updated MND. Avoidance and minimization measures can include, but are not limited to: 1. *Lighting Plan*: A Lighting Plan that identifies existing ambient lighting conditions, analyzes the Project lighting impacts on the adjacent Conservation Area, and demonstrates that the proposed lighting plan will not significantly increase the lighting on the Conservation Area. The Lighting Plan should identify measures that address light and glare from interior and exterior building lighting, safety and security	Prior to finalizing CEQA document	Rancho California Water District/ Project Applicant

	lighting, and vehicular traffic accessing the site at a minimum. 2. *Noise Plan*: A Noise Plan to avoid and minimize noise impacts based on an assessment of Project noise impacts on adjacent conservation areas during construction and post development. The MSHCP identifies that Project noise impacts do not exceed the residential standards within the Conservation Areas. 3. *Landscaping Plan*: A Landscaping plan that includes the use of native plant material on the Project site and avoids the use of invasive plant species identified in Table 6-2 of the MSHCP. 4. *Fencing Plan*: A Barrier and Fencing plan that provides specific details designed to minimize unauthorized public access, domestic animal predation, illegal trespass, and dumping in the MSHCP Conservation Area (such as block walls along areas directly adjacent to potential conservation areas) and 5. *Best Management Practice*s: The MND should incorporate the guidance in MSHCP Section 7.0 and Appendix C of the MSHCP for addressing Best Management Practices.		