



DESERT TORTOISE COUNCIL

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Via email only

July 13, 2026

Derek Newland, Planner
County of San Bernardino
Land Use Services Department
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RE: Skanska Essex Mine Initial Study & Mitigated Negative Declaration (PROJ-2024-00123;
APN 0655-181-16)

Dear Mr. Newland,

The Desert Tortoise Council (Council) is a non-profit organization comprising hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and northern Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

Both our physical and email addresses are provided above in our letterhead for your use when providing future correspondence to us. When given a choice, we prefer to receive emails for future correspondence, as mail delivered via the U.S. Postal Service may take several days to be delivered. Email is an "environmentally friendlier way" of receiving correspondence and documents rather than "snail mail."

We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the proposed project in habitats potentially occupied by the Mojave desert tortoise (*Gopherus agassizii*) (synonymous with Agassiz's desert tortoise), our comments include recommendations intended to enhance protection of this species and its habitat during activities that may be authorized by the County of San Bernardino (County), which we recommend be added to project terms and conditions in the authorizing documents (e.g., permits, plan approvals, etc.) as appropriate. Please accept, carefully review, and include in the relevant project file the Council's following comments and attachment for the proposed action.

The Mojave desert tortoise is among the top 50 species on the list of the world's most endangered tortoises and freshwater turtles. The International Union for Conservation of Nature's (IUCN) Species Survival Commission, Tortoise and Freshwater Turtle Specialist Group, now considers the Mojave desert tortoise to be Critically Endangered (Berry et al. 2021), "... based on population reduction (decreasing density), habitat loss of over 80% over three generations (90 years), including past reductions and predicted future declines, as well as the effects of disease (upper respiratory tract disease/mycoplasmosis). *Gopherus agassizii* (sensu stricto) comprises tortoises in the most well-studied 30% of the larger range; this portion of the original range has seen the most human impacts and is where the largest past population losses have been documented. A recent rigorous rangewide population reassessment of *G. agassizii* (sensu stricto) has demonstrated continued adult population and density declines of about 90% over three generations (two in the past and one ongoing) in four of the five *G. agassizii* recovery units and inadequate recruitment with decreasing percentages of juveniles in all five recovery units."

This status, in part, prompted the DTC to join Defenders of Wildlife and the Desert Tortoise Preserve Committee (DTPC) to petition the California Fish and Game Commission (Commission) in March 2020 to elevate the listing of the Mojave desert tortoise from Threatened to Endangered under the California Endangered Species Act (CESA) (Defenders of Wildlife et al. 2020). Importantly, following California Department of Fish and Wildlife's (CDFW) (2024a) status review, in their April 2024 meeting the California Fish and Game Commission voted unanimously to accept the CDFW's petition evaluation and recommendation to uplist the tortoise from threatened to endangered under the CESA based on the scientific data provided on the species' status, declining trend, numerous threats, and lack of effective recovery implementation and land management (CDFW 2024b). On July 15, 2025, the tortoise was officially uplisted to endangered status under the CESA (Commission 2025).

Description of the Proposed Project

Background: In 1994 the County approved the operations of an aggregate mine and reclamation plan for mining operations for 20 years (previous project). The 1994 Plan allowed mining on 50-acres, with approximately 32 acres within an unnamed wash (Figure 1). Mining was permitted to a depth of 20 feet with 3 horizontal to 1 vertical (3H:1V side slopes). An additional 18 acres was approved as an Operations Area.

The 1994 Plan operations permit expired in 2014, and the 1994 Reclamation Plan expired in 2019. Since around 2005, the site has been generally inactive with an "idle" status.

Current Proposal: Skanska USA Civil West (Skanska or Applicant) has submitted an application to the County for a Conditional Use Permit (CUP) to renew mining operations for the Essex Sand & Gravel Mine (proposed Project) and a revised Mine Reclamation Plan (2024 Plan).

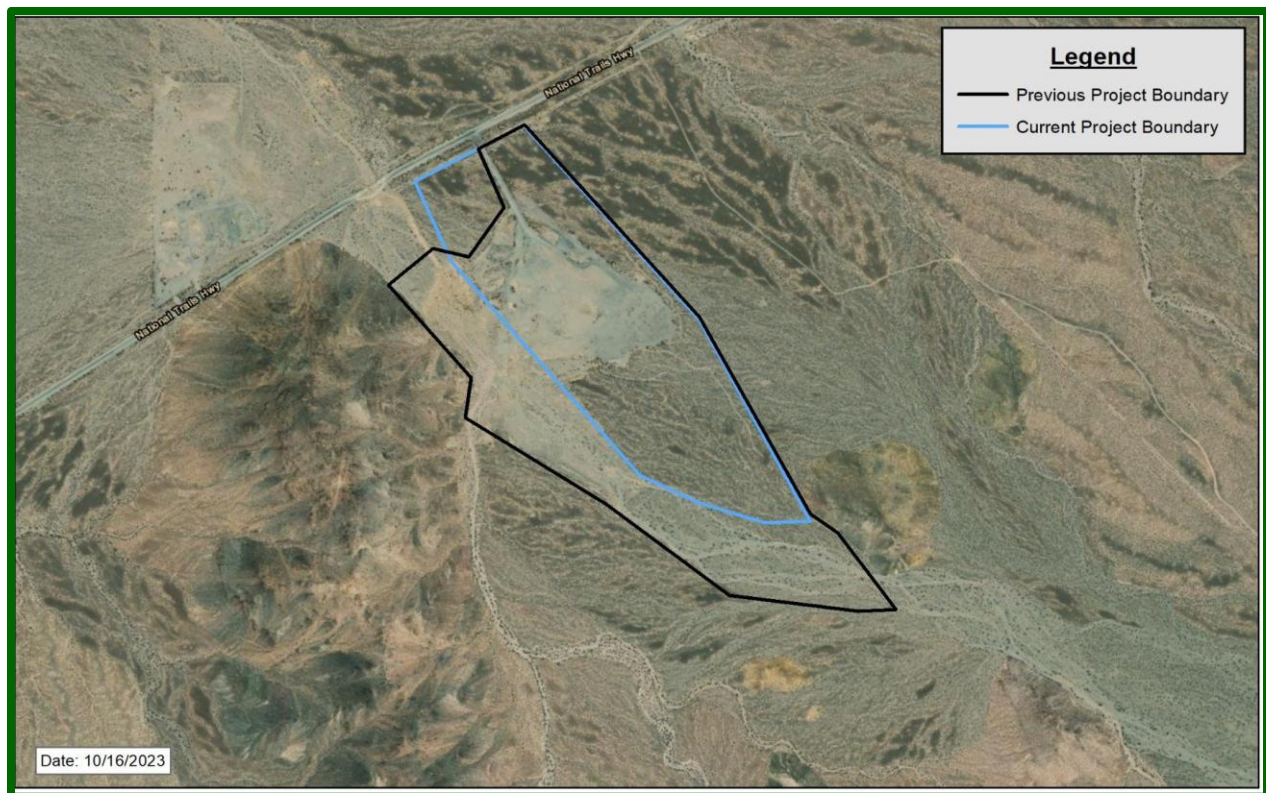


Figure 1. Location of previous approved mining activities and requested mining activities.
Previous mining activities included a wash on the left or southwest side of the blue line.

The purpose of the mine is to continue to provide aggregate materials (crushing, screening, and asphalt production) for nearby road maintenance projects (e.g., Interstate 40 and National Trails Highway). Operations would vary substantially from year to year from inactive up to 400,000 tons per year (tpy) depending on federal, Caltrans, and County Road projects.

The Applicant's proposed activities include a 90-acre Mine Reclamation Plan: 50-acres of active mining, 15-acres of setbacks, and avoidance of the 25-acres within the wash deemed reclaimed by the County. Mining activities include equipment to excavate and haul aggregate, a portable crushing and screening plant with conveyors, a portable asphalt batch plant, materials storage area, storage area for spoils, and a temporary staging area for nearby construction projects. Support facilities include a portable office, storage structure, and scales. Excavated material (raw or processed) road demolition material, recycled material, and soils may be stockpiled onsite for use as needed for construction and maintenance (Lilburn Corporation 2024). The requested permit term is 50 years.

"Future planned mining will be conducted on approximately 40 acres to the east and outside of the wash mostly within the previously permitted 1994 Plan boundary and within the existing desert tortoise fencing" (Lilburn Corporation 2024) (Figure 2).

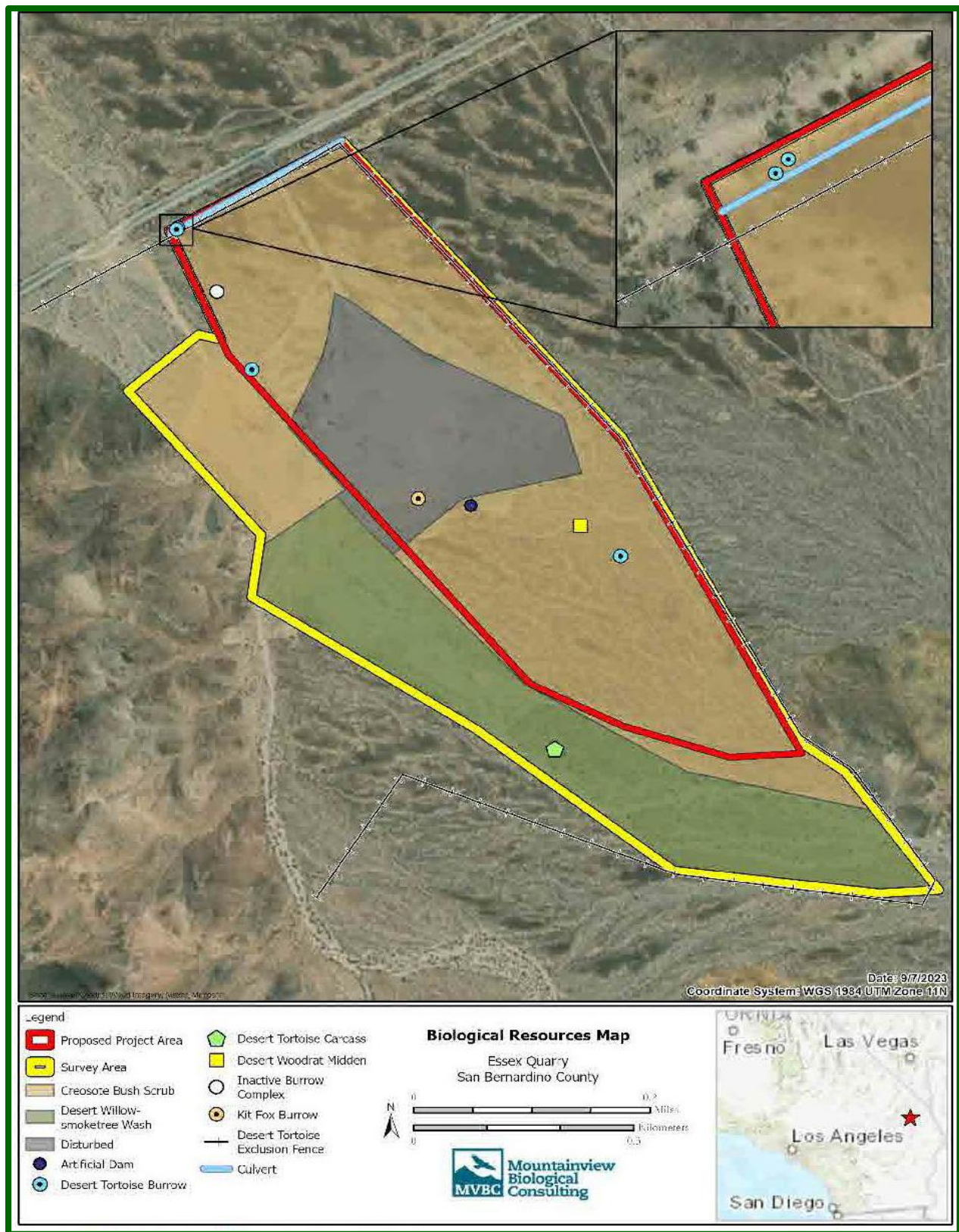


Figure 2. Locations of four tortoise burrows and one tortoise carcass in the previous project area and proposed project area.

The proposed Project is located within a 536.6-acre parcel owned by the Applicant on the southeast side of the National Trails Highway (NTH). It is 6.5 miles southwest of the intersection with Interstate 40 (I-40). The site is approximately six miles northeast of Essex and 33 miles west of Needles. It is located in the Chemehuevi Critical Habitat Unit (CHU) for the Mojave desert tortoise (USFWS 1994a) and the Chemehuevi Tortoise Conservation Area (TCA) (USFWS 2011).

Comments on the Proposed Project

We appreciate that the County notified the Council of the availability of the Initial Study/Mitigated Negative Declaration Skanska Essex Mine (Initial Study/MND), and appendices, and related documents for public comment.

For all documents provided we were disappointed with the absence of citations from the scientific literature with respect to impacts on biological resources including the tortoise. Statements were made and conclusions drawn in the Initial Study/MND that were lifted from appendices provided to the Initial Study/MND. These documents had little or no relevant data to support the statements/conclusions in those appendices and consequently the statements/conclusions made in the Initial Study/MND regarding biological resources including the tortoise are unsupported. We are surprised with this because the California Environmental Quality Act (CEQA) requires that agencies use the best scientific information available.

Similarly, we found statements that were carefully crafted in the appendices and repeated in the Initial Study/MND that gave the impression that certain biological resources were absent. The data to support these statements was the result of conducting limited surveys (i.e., reconnaissance-level and not species protocol surveys) on part of the action area/area. Indirect impacts were not described or analyzed for biological resources including the tortoise. Also, biological resource assessment was not updated since 2023. It did not reflect the addition of species afforded protections under the California Endangered Species Act (CESA) or proposed for listing under the Federal Endangered Species Act (FESA).

As we provide comments on the Initial Study/MND and other supporting documents, we will identify these deficiencies in complying with CEQA as well as other legal/regulatory requirements such as the FESA and CESA.

Biological Resources Assessment, Jurisdictional Delineation, and Native Plant Protection Plan

The County provided the “Biological Resources Assessment, Jurisdictional Delineation, and Native Plant Protection Plan for the Essex Sand And Gravel Mine Project, in Unincorporated San Bernardino County, California” prepared by Jennings Environmental (2023) (BRA) as an appendix to the Initial Study/MND.

Page 4: “Jennings Environmental, LLC (Jennings) was retained by Lilburn Corporation (Lilburn) to conduct a literature review and reconnaissance-level survey for the proposed Essex Sand and Gravel Mine Project.” On page 5 Jennings Environmental stated, “Field Surveys were conducted using Jennings Environmental Sub-Consultant, Mountain View Biological Consulting (MVBC). MVBC Biologists conducted a meandering pedestrian survey of the Survey Area.”

There is a substantial difference between conducting a reconnaissance-level survey of a site by walking meandering surveys looking for evidence of use by numerous species of special concern and conducting a focused, regimented survey protocol for one species such as the tortoise. The presence-absence survey protocol for the tortoise includes 100 percent coverage of the “action area,” which is larger than the project area/project footprint (USFWS 2009a). Please see page 11 of this letter under “Page 4: Information contained in this document . . .” for a regulatory definition of “action area.” The U.S. Fish and Wildlife Service’s (USFWS) focused survey protocol for the tortoise (USFWS 2009a) to determine presence-absence has been developed using ecological and behavioral parameters specific to the tortoise because the tortoise is difficult to detect (USFWS 2009b, 2015, 2025) when it is above ground. The presence-absence survey protocol also used statistical analysis of data collected from years of tortoise surveys and the ability of qualified biologists to detect tortoises to determine the protocol to maximize the detection of tortoises (USFWS 2009b, 2015, 2025).

Tortoise behavior and color make it difficult to observe tortoises present at a site in the Mojave Desert. Tortoises spend much of their lives in burrows, even during their seasons of activity (USFWS 2020a). During drought years desert tortoises decrease surface activity and remain mostly inactive or dormant underground in burrows (Henen et al. 1998, Duda et al. 1999). These behaviors are adaptations to the harsh dry environment in which they live. Their cryptic coloration makes it exceedingly difficult to see a tortoise when conducting protocol surveys even when they are active/above ground.

The effectiveness of their cryptic coloration is demonstrated in the following account with one of our Board members. A wildlife biologist from a federal agency was walking with a group of wildlife biologists in a desert wash. He stepped over a small amount of plant debris deposited from a recent low flow event. He was informed by the other biologists following him that he just stepped over a tortoise. It was sitting next to the plant debris. He did not see the tortoise.

Detection rates for tortoises above ground decrease with the observer’s distance from the tortoise (USFWS 2009b, 2015, 2025) and decrease more when tortoises are in burrows. Because tortoises spend most of the year in their burrows (USFWS 2020a), it is difficult to see them. Hence, finding tortoise sign is important. The presence of tortoise sign indicates use of an area by tortoises. However, some tortoise sign is difficult to detect because of its small size (e.g., scat). Consequently, a meandering survey that does not follow an approved protocol to account for the difficulty in detecting tortoises and no information on where transects were walked, their width, the qualifications of the persons conducting the survey, etc. is more likely to result in finding little or no evidence of tortoise use or presence (i.e., tortoise sign) in the action area. In many cases the results of a reconnaissance-level survey that was not a focused presence-absence survey would be an inaccurate representation of the use of the action area by the tortoise, and for a result of no evidence, likely result in unauthorized incidental take violating FESA and CESA. When tortoise sign is found, it may mean that other tortoise sign is present in the action area but not found because the survey method implemented would not have a high probability of detecting tortoises/tortoise sign.

Conducting reconnaissance-level meandering surveys is an example of a survey that does not comply with FESA and CESA for the tortoise. Although the BRA stated that presence-absence surveys for the tortoise were conducted following the USFWS protocol, we dispute this statement.

Please see our comments below under “Page 4, Information contained in this document is in accordance with accepted scientific and technical standards that are consistent with the requirements of the United States Fish and Wildlife Service (USFWS) and CDFW” that explains the reasons for disagreeing with this statement.

Page 4: “This biological resources assessment is designed to address the potential effects of the proposed project on . . . *any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) or species designated as sensitive by the California Department of Fish and Wildlife (CDFW) or the California Native Plant Society (CNPS)*” (emphasis added).

The BRA was prepared in 2023. Since then, changes have occurred under FESA and CESA regarding species currently listed or proposed for listing. Species have been added under these categories but they are not included in the BRA or the Initial Study/MND. Under FESA, the U.S. Fish and Wildlife Service (USFWS), on December 12, 2024, proposed to list the Monarch butterfly (*Danaus plexippus*) as a threatened species and designate critical habitat. This species is not mentioned in the BRA. When querying USFWS’s Information for Planning and Consultation (IPaC) (<https://ipac.ecosphere.fws.gov/location/index>), the range of the Monarch butterfly is identified as occurring in the proposed Project area.

Western Burrowing Owl: On page 10 of the BRA is the statement that the “burrowing owl (BUOW) is a state and federal SSC” (species of special concern). On page 11, is the statement “The BUOW is not listed under the state or federal Endangered Species Act but is considered both a federal and state Species of Special Concern.”

The legal status of the western burrowing owl has changed. The western burrowing owl was designated as a Candidate Species for Listing with the California Fish and Game Commission on October 9, 2024. As a candidate for potential listing, this species is temporarily afforded the same protections as a state-listed endangered or threatened species under CESA until the Commission makes a final determination on its status under CESA. Hence the County and the Applicant should treat the burrowing owl as a listed species under CESA. This includes surveys for the species to determine its use of the proposed Project and nearby areas, the occurrence of habitat in and near the Project area, and the requirement to obtain a section 2081 incidental take permit if CDFW determines that the proposed Project is likely to result in take of the burrowing owl.

Prior to the status of the burrowing owl changing to include protections under CESA, the CDFW protocol for burrowing owl surveys (CDFG 2012) as a species of special concern required that peripheral transects be surveyed at 30-, 60-, 90-, 120-, and 150-meter intervals in all suitable habitats adjacent to the subject property to determine the potential indirect impacts of the project on this species. These transects are in addition to surveying the project area. Because the BRA is a report based on a reconnaissance-level survey for the burrowing owl, this survey protocol was not implemented. Consequently, there is little information on the habitat condition and use of the project site and adjacent areas by burrowing owls. It is unlikely that sign of burrowing owl use would have been detected using general meandering surveys of the Project area. Areas adjacent to the Project area were not surveyed so if burrowing owl sign occurred there it would not have been reported. The County should require the Applicant to contact CDFW to determine whether the CDFW survey protocol for the burrowing owl has changed with its change in legal status.

LeConte's Thrasher: On page 44, Table 2 – CNDDDB Potential to Occur, Le Conte's thrasher (*Toxostoma lecontei*) is listed as having no Federal or State status under FESA or CESA, a species of special concern, and suitable habitat not occurring on site. “As such, this species is considered absent from the Project site.”

During the April 16, 2026 California and Fish and Game Commission meeting, the LeConte's thrasher was “named California Endangered Species Act candidate species and will undergo a one-year species status review” (<https://wildlife.ca.gov/News/Archive/california-fish-and-game-commission-increases-bear-harvest-limit-to-2-hears-recommendations-on-mpa-petitions>). As a candidate for potential listing, this species is temporarily afforded the same protections as a state-listed endangered or threatened species under CESA. Please revise the information on the regulatory status of this species in the BRA and the Initial Study/MND.

The previous project area is adjacent to the Project area. It is comprised of several acres of a wash. According to the County “the wash area crossing the central portion of the [previous project] site appears to be reclaimed and supports a vibrant riparian community of maturing smoke trees” (Lilburn Corporation 2024). According to the BRA, the habitat for LeConte's thrasher is “primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.”

The habitat description for the thrasher appears to be similar to the habitat in the wash of the previous project area which is adjacent to the Project area. If the purpose of CEQA is to analyze the direct, indirect, and cumulative impacts of a proposed project on resources that may be affected by that project, the indirect and cumulative impacts of the proposed Project would likely extend to the areas adjacent to the Project area including the previous project area and wash habitat. Therefore, the previous project area and other areas adjacent to the proposed Project should be included and analyzed in the BRA and Initial Study/MND. The impacts from mining activities at the proposed Project area do not stop at the boundary of the Project area. If correct, the impacts to the thrasher and its habitat should be analyzed in the BRA and Initial Study/MND.

Because the BRA was not updated to reflect the additions of these species to FESA and CESA, this is an absence of relevant information on biological resources and absence of analysis of impacts. It also raises the question of whether the information collected and reported and conclusions and recommendations made in the BRA after conducting a multi-species field reconnaissance-level survey and adopted in the Initial Study/MND comply with requirements under FESA, CESA, and CEQA to survey for and analyze the impacts to these species from implementation of the proposed Project. Please revise the BRA to reflect information on the regulatory status of the species listed above and other documents such as the Initial Study/MND that rely on the BRA for their information, analysis, and conclusions. Please add an analysis of impacts to these species from implementation of the proposed Project.

Rare Plants: On page 5 of the BRA, Jennings Environmental says that “survey timing was outside the floristic period for rare plants.”

Consequently, any conclusions that were made in the BRA that rare plants are not present or conclusions made in other documents that relied on the BRA such as the Initial Study/MND should be revised to indicate that field surveys have not been performed to determine the presence of rare plants in the Project area or adjacent areas. Please see our comments on pages 42-44 Appendix D, Table 2 regarding the absence of this information and additional information on rare plants that we were unable to find in the BRA.

Failing to update the BRA with respect to the status of species under FESA and CESA and not including the results of rare plant surveys conducted at appropriate times of the year are examples of not complying with FESA and CESA.

Page 4: “This biological resources assessment is designed to address the *potential effects of the proposed project on designated critical habitats and/or any species currently listed or formally proposed for listing as endangered or threatened* (emphasis added) under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA).”

In reviewing the BRA, we looked for information that would address the potential effects of the proposed project on designated critical habitats and/or any species listed or proposed under FESA, listed or a candidate under CESA, or other species of special concern. Potential effects would include direct, indirect, and cumulative effects for these species and habitats under CEQA and that these would be listed as a minimum and analyzed in the BRA. We were unable to find this information. For example, for the tortoise under “Literature Review” (page 10 of the BRA), the information provided is its legal status, which is incorrect under CESA (see our comments below), one sentence on threats, a few sentences on typical vegetation association and topography where tortoises typically occur, and a sentence on where tortoise burrows typically occur. This is followed (page 14 of the BRA) by the results of field studies that reported finding a tortoise carcass and tortoise burrows in the area surveyed, but “no sign of tortoise (scat, tracks, etc.) within the entrance to the burrows or in the vicinity of the burrow.” On page 16 of the BRA under “Conclusions and Recommendations,” the BRA concludes that the site contains tortoise habitat and “tortoises have been documented within the region,” and recommends completing pre-construction surveys “prior to any ground-disturbing activities or desert tortoise fence installation.” This recommendation is repeated on page 42, Table 2 of the BRA.

We found no information that addressed the potential effects of the proposed Project on designated critical habitat. This designation has no bearing on non-federal actions such as the proposed Project. However, we found no information on the potential effects of the proposed Project on the habitat for the tortoise in this area including habitat connectivity within the Chemehuevi Tortoise Conservation Area.

We found no information that addressed the potential effects of the proposed Project to the tortoise such as mortality from vehicle strikes (a direct impacts causing mortality or injury) or indirect impacts.

The USFWS has documented substantial declines in tortoise abundance and density since 2004, especially in California (USFWS 2015, 2016, 2018, 2019, 2020b, 2022a, 2022b, 2025). The primary reason for the substantial decline in tortoise abundance, density, and recruitment has been from increased mortality caused by indirect impacts from human activities.

Human activities result in numerous indirect impacts to the tortoise that have a substantial cumulative effect on the species and its habitat. These include:

- degradation and/or fragmentation of tortoise habitat (USFWS 2011);
- surface disturbance that results in loss of tortoise forage and cover and promotes proliferation of non-native invasive plant species (Brooks and Berry 2006) via construction equipment, vehicles, and other sources;
- replacement of native forbs that have high nutritional and water value with non-native invasive grasses that have low nutritional value and water value resulting in malnutrition, associated diseases (Drake et al. 2016) and decreased reproductive output (Henen 2002) for tortoises;
- production of fugitive or anthropomorphic dust that impedes growth and reproduction of native plants (Eller 1977, Farmer 1993, Sharifi et al. 1997, Thompson et al. 1984, and Wijayratne et al. 2005) and buries soil crusts killing the cyanobacteria and green algae (Belnap 2002) that affects tortoises by reducing the quantity and quality of available forage and availability of cover from predators and thermal extremes;
- increased size, intensity, and frequency of human-caused wildfires from fuels provided by non-native invasive plant species (Brooks and Esque 2002);
- noise and vibration that cause tortoises to leave their burrows (Medica et al. 1986) exposing them to predation and temperature extremes;
- increased predation from substantially increased numbers of coyotes that utilize human subsidies of food and water (Richter et al. 2024), and ravens that utilize human subsidies of food, water, roosting, perching, and nesting locations (Boarman 2003);
- adverse effects to tortoise behavior and physiology caused by the presence of roads (Harju et al. 2024, Henen 2002); and
- increased human access that provides opportunities for vandalism and collecting tortoises for pets (Lovich and Bainbridge 1998, Berry et al. 2020).

Major sources of surface disturbance include residential, commercial, and industrial development projects and associated roads/highways; military training; and off-highway vehicle use (USFWS 2011, Tuma et al. 2016) while minor sources of surface disturbance can result in cumulative major impacts to tortoises/tortoise habitat.

Several of these indirect impacts to the tortoise would likely occur from the operations and maintenance of the proposed Project. They include surface disturbance that results in loss of tortoise forage and cover and promotes the transport and proliferation of non-native invasive plant species (Brooks and Berry 2006) via construction equipment, vehicles, and other sources; replacement of native forbs that have high nutritional and water value with low nutritional non-native invasive grasses resulting in malnutrition, associated diseases (Drake et al. 2016) and decreased reproductive output (Henen 2002); production of fugitive or anthropomorphic dust that impedes growth and reproduction of native plants (Eller 1977, Farmer 1993, Sharifi et al. 1997, Thompson et al. 1984, and Wijayratne et al. 2005) and buries soil crusts killing the cyanobacteria and green algae (Belnap 2002); noise and vibration that causes tortoises to leave their burrows (Medica et al. 1986) exposing them to predation and temperature extremes; increased predation from substantially increased numbers of coyotes that utilize human subsidies of food and water (Richter et al. 2024), and ravens that utilize human subsidies of food, water, roosting, perching, and nesting locations (Boarman 2003); and adverse effects to tortoise behavior and physiology caused by the presence of roads (Harju et al. 2024, Henen 2002). The indirect impacts to the

tortoise/tortoise habitat should be described and analyzed in the BRA and Initial Study/MND to determine the extent of the impacts and identify appropriate mitigation that the Applicant is required to implement to reduce the degree of adverse impacts to less than significant. Absent this analysis, the County cannot say with any assurance or verification from the scientific literature that the Mitigated Negative Declaration is the appropriate document under CEQA for the proposed Project.

This absence of information on “the potential effects of the proposed project on designated critical habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA)” means the BRA does not provide the information it says it would. This is a major example of current relevant information on biological resources and analysis of impacts that were overlooked or absent in the BRA and the Initial Study/MND. The BRA should be revised to include this information so the County may include this analysis in their CEQA document and develop and require implementation of effective mitigation to offset adverse effects to the tortoise/tortoise habitat.

Page 4: “Information contained in this document is *in accordance with accepted scientific and technical standards that are consistent with the requirements of the United States Fish and Wildlife Service (USFWS) and CDFW*” (emphasis added).

We do not agree with this statement. We provide our reasons below.

On page 6, the BRA stated, “As such, protocol surveys were conducted in accordance with the 2018 USFWS Desert Tortoise Survey Protocol as described below:

- Use 10-meter-wide belt transects to cover the action area.
- On the datasheet included in this guidance, record all evidence that indicates desert tortoises may be present (e.g., scat, burrows, carcasses, courtship rings, drinking depressions, etc. in addition to live tortoises).
- Use the Field Manual (USFWS 2009) to categorize the condition of sign.
- Record information and measure desert tortoises as described for large project sites.
- Use mirrors or flashlights to inspect burrows.”

On page 25, Figure 4 of the BRA, the area in which the presence-absence survey for tortoise/tortoise sign is mapped. This map indicates that the “proposed project area” and “previous project area” were surveyed within the boundaries of these two areas (Figure 2 in this letter).

The protocol survey to determine presence-absence for the tortoise (USFWS 2019) (and this USFWS protocol has been adopted by CDFW) has many requirements in addition to those listed above. Another requirement is to survey 100 percent of the action area. The “action area” is defined in 50 Code of Federal Regulations 402.2 and the USFWS Desert Tortoise Field Manual (USFWS 2009a) as “all areas to be affected directly or indirectly by proposed development and not merely the immediate area involved in the action.” “The extent of the action area is not limited to the “footprint” of the action nor is it limited by the authority of the Federal, state, or local agency or any other entity proposing the project.” Thus, the action area is larger than the project footprint/project area. It includes the area of indirect impacts previously listed such as the attraction of tortoise predators to the Project area and nearby, introduction/and or spread of non-native

invasive annual plants, noise/ground vibrations, presence of roads and road use, and fugitive or anthropomorphic dust deposited downwind on native perennial and annual plants. For most of these impacts, the extent of their effect would extend in all directions from the Project area. However, the only area surveyed outside the Project area was the previous project area on the southwest side of the Project area.

Using the information provided in the BRA that identified the area in which the presence-absence survey was implemented, we conclude that the survey protocol that was implemented did not follow all the requirements of the USFWS's and CDFW's presence-absence survey protocol. The action area is to be surveyed not the project area and one side of the project area adjacent to it. Hence, the results of the small project survey were not conducted in accordance with all requirements of the USFWS desert tortoise survey protocol.

Another requirement is that the surveyor should provide the complete results of their work so the USFWS "can fully understand the project-specific circumstances, such as the conditions under which the survey was conducted (e.g., weather, experience of the surveyors, access to the survey area, degree of disturbance of the land, etc.)" "the nature of the year in which the survey occurred (i.e., if it rained a lot, desert tortoises are likely to have been active and are more likely to have left evidence of their presence), how much time surveyors spent at the site, and whether they were conducting a focused survey for tortoises or looking for a suite of biological and/or cultural resources." We did not find this information in the BRA.

Another requirement is that the persons conducting the presence-absence survey should have appropriate qualifications. "Using desert tortoise surveyors with appropriate qualifications will improve confidence in the survey results." This information should be provided in the BRA as well as when the results of the reports were submitted to the USFWS and CDFW and the responses of these agencies. We did not find this information in the BRA.

The project area and action area are in the Chemehuevi Critical Habitat Unit for the tortoise. As part of the protocol survey "when the action area is within the boundaries of critical habitat, please use these physical and biological features in your description" of the habitat (USFWS 2019). We did not find this information in the BRA.

This is an example of limiting the relevant information provided in the BRA. The information provided gives the impression that the USFWS's/CDFW's presence-absence survey protocol was followed when in reality according to the information provided in the BRA, only part of the protocol was followed. By limiting the information provided, the BRA gives the impression of compliance while the description of what was implemented when compared to the description of how to implement the protocol does not. Also, this is an example of non-compliance with FESA and CESA.

Formal protocol surveys must be performed for the tortoise covering the entire action area for the County (1) to ascertain the use of the action area by the tortoise (2) to comply with FESA and CESA, and (3) to determine the extent of the direct, indirect, and cumulative impacts to the tortoise from the implementation of the proposed Project for 50 years. From the information presented in the BRA, the County has incomplete information to determine the extent of use of the action area by tortoises.

Page 5: In conducting a literature search of flora and fauna in/near the Project area, “California Native Plant Society’s Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (CNPS 2023), issuer of the California Rare Plant Rank (CRPR)” was used. However, later in the BRA we found no mention of any species of plants that were listed on the CNPSEI including in Appendix D, Table 2. For example, on page 7 of the BRA is mention of a “comprehensive list of the plant species observed during the survey,” but we found no list of rare plants reported from the literature search. Please access the current version of CNPS and include this information of rare flora previously reported as occurring nearby (i.e., Fenner, Fenner Spring, Little Piute Mountains, and Essex quads) in the BRA as was provided for wildlife species in the BRA. Depending on the results, please include this information in the Initial Study/MND and any mitigation that should be implemented for rare plants that may be impacted by the proposed Project.

Page 5: In conducting a literature search of the flora and fauna of the Project area and nearby lands, the BRA did not indicate that USFWS’s IPaC was used. IPaC is the USFWS’s information system that allows a project proponent to determine whether that “project could potentially affect USFWS trust resources, such as migratory birds, species and critical habitat proposed or listed under the Endangered Species Act” (<https://ipac.ecosphere.fws.gov/>). Please update the BRA to include a search of IPaC, list the species that IPaC identifies as potentially occurring in the Project area (e.g., Monarch butterfly), and analyze the impacts to these species from the implementation of the proposed Project.

Page 6: “The Project site is located within a region that does contain habitat suitable for the listed species, desert tortoise. Additionally, the site is located within designated critical habitat.”

The BRA neglected to mention that the proposed Project is located in the Chemehuevi Tortoise Conservation Area, an area identified to be managed for the conservation of the tortoise (USFWS 1994b, USFWS 2011, BLM 2016).

Page 9: “A comprehensive list of the wildlife species observed during the survey is provided in Appendix D.”

In this appendix (page 41 of the BRA), the tortoise is one of 17 species of animals reported in Table 1. “Species Observed On-Site.” Because the tortoise was observed on-site along with four tortoise burrows and a carcass, the data indicate that the Project area is used by the tortoises. Because there is no federal nexus for the proposed Project, the County should condition the CUP so that the Applicant must obtain an incidental take permit to comply with FESA and CESA before initiating any ground disturbance or vehicle use.

Page 10: “The desert tortoise is a State and federally-listed threatened species.”

As provided earlier in this letter, the Commission uplisted the tortoise to endangered in July 2025. Please revise this information in the BRA (e.g., also page 41) and all other documents in which the tortoise is mentioned for the proposed Project. As evident from this uplisting, the demographic status of the tortoise continues its multi-decadal decline with most populations in California at a density (Allison and McLuckie 2018, USFWS 2015, 2016, 2018, 2019, 2020b, 2022a, 2022b, 2025) below the level identified by the USFWS for population viability (USFWS 1994b).

Page 10: “With the adoption of the West Mojave Plan (U.S. Bureau of Land Management 2005), all lands that are outside Desert Wildlife Management Areas (DWMA), including the subject parcel, are characterized as Category 3 Habitat, which is the lowest priority management area for viable populations of the desert tortoise.”

We are unsure why this information is included in the BRA. The West Mojave Plan amended the California Desert Conservation Area (CDCA) Plan (BLM 1980). In 2016 BLM adopted the Desert Renewable Energy Conservation Plan (DRECP) that amended the CDCA Plan with numerous Land Use Plan Amendments (LUPA) (BLM 2016). Among them, it eliminated DWMA designations and established habitat compensation requirements for tortoise habitat lost from implementation of projects and placed a cap on development within each Tortoise Conservation Area/Critical Habitat Unit. If the County decides to keep this information, please revise it to reflect BLM’s current requirements for projects in tortoise critical habitat that include 5:1 compensation. Please revise the information in the BRA to reflect the latest amendments to the CDCA Plan with respect to how they affect the tortoise and its management.

Page 11: “The desert kit fox is not federally- or state-listed, but is considered a species of local concern by the County of Los Angeles.”

The proposed Project is in San Bernardino County, not Los Angeles County. Further, the desert kit fox (*Vulpes macrotis arsipus*) is protected under the California Code of Regulations, Chapter 5, section 460 (14 CCR § 460), which prohibits “take” of desert kit fox for any reason. CDFW uses the USFWS’s (2011) protocol for San Joaquin kit fox, for surveying for the desert kit fox. (<https://www.fws.gov/sites/default/files/documents/survey-protocols-for-the-san-joaquin-kit-fox.pdf>). We request that information on the methodology implemented when surveying for the desert kit fox and implementation of CDFW’s desert kit fox protocol be added to the BRA and the results reported in the BRA and Initial Study/MND or BA Report to provide a complete administrative record and document that the County has complied with CDFW requirements and California Fish and Game Code.

Page 14: “No State and/or federally listed threatened or endangered species or other sensitive species were observed on-site during surveys.”

This statement appears to contradict information provided on page 41 of the BRA in which the tortoise is identified as a species “observed on-site.” Please explain this discrepancy in information provided in the BRA.

Page 14: “There was no sign of tortoise (scat, tracks, etc.) within the entrance to the burrows or in the vicinity of the burrows.”

We are unsure of the relevance of this information when conducting the presence-absence survey protocol for the tortoise. The qualified biologist should be looking for tortoise sign that includes scat and tracks throughout the action area, and not limited to the area in and near tortoise burrows. As presented, this information suggests that the person(s) conducting the presence-absence survey for the tortoise only looked for tortoise scat and tracks in, at or near tortoise burrows. If correct, this would be another example that the presence-absence survey protocol for the tortoise conducted for the proposed Project area did not follow the entire protocol. Please clarify this information in the BRA and the Initial Study/MND.

Page 14 and Page 25, Figure 4: “The tortoise survey identified additional suitable burrows that were not occupied.”

This is not surprising. From the four tortoise burrows found we know that one or more tortoises use the proposed Project site. We conclude this because tortoises used an average of 11.7 burrows per year, with most (90%) tortoises using 7–17 burrows per year. Tortoises used an average of 4.8 new burrows per year (Rautenstrauch et al. 2002). Thus, an unoccupied burrow or nearby burrows does not mean that the tortoise has abandoned the burrow(s) or the burrow is no longer important to the survival of the tortoise. This is an example of absence of relevant information on biological resources. The information presented gives the impression that these tortoise burrows have been abandoned or are no longer used by tortoises.

In addition, “Areas of small projects are less likely to include the entire home ranges of desert tortoises; therefore, desert tortoises that regularly use the area may be off site during surveys” (USFWS 2019b), and therefore not using burrows when the survey was conducted.

Page 17: Under “Findings for the desert tortoise,” there is no recommendation to conduct additional surveys for the tortoise.

Page 18: “Burrowing Owl – Since there is some habitat within the Project site and adjacent area that is suitable for BUOW in general, the following mitigation measure should be implemented: 30-Day Pre-Construction Survey.”

Surveys are not mitigation. Surveys gather information to help determine the impacts to the subject species that would occur from implementation of the proposed Project. If adverse impacts would occur and rise to the level of take, then mitigation is developed to fully offset those impacts for listed species under CESA and minimize and mitigate to the maximum extent practicable for listed species under FESA.

Page 42: “Suitable habitat for this [desert tortoise] species does occur on site. As such, preconstruction surveys are recommended.”

We did not see this recommendation as a requirement in the Initial Study/MND. Please add it to the Initial Study/MND. Please see our comments on page 44 (below) about preconstruction surveys for the tortoise. The term “preconstruction surveys” should be replaced with “clearance surveys” (USFWS 2009a). Clearance surveys are “conducted immediately prior to surface disturbance at each site within the project area or following construction of a desert tortoise-proof fence or similar barrier encompassing the project area to ensure that tortoises cannot enter the project area” (USFWS 2009a).

Pages 42-44: In Appendix D, Table 2, the BRA lists animal species that have been recorded from the vicinity of the proposed Project as provided by California Natural Diversity Database (CNDDB). However, we found no corresponding information in this table for plants with designations by California Native Plant Society (CNPS). Please add this information to this table.

Page 44: “Because the [project] site does contain suitable habitat and tortoise have been documented within the region, it is recommended that pre-construction surveys be completed for this species prior to any ground-disturbing activities or desert tortoise fence installation. These surveys should be conducted by a qualified biologist and at an appropriate time of day/year to observe signs of desert tortoise. Surveys should also be conducted using the current survey protocol from the USFWS.”

The BRA failed to mention in this section another reason that surveys to find and remove tortoise from the proposed project site should be conducted – tortoise sign was found in the proposed Project area and in the prior project area adjacent to the proposed Project area.

Because the BRA claims that presence-absence surveys for the tortoise have been conducted, we presume that the recommendation to conduct pre-construction surveys means to conduct surveys just prior to initiation of ground disturbance. The USFWS calls such surveys clearance surveys (USFWS 2009a). According to the USFWS clearance survey protocol (USFWS 2009a), clearance surveys are “conducted immediately prior to surface disturbance at each site within the project area or **following** (emphasis added) construction of a desert tortoise-proof fence or similar barrier encompassing the project area to ensure that tortoises cannot enter the project area.” The reason for conducting the clearance survey protocol immediately after constructing the tortoise exclusion fencing is to ensure that no tortoises are trapped within the exclusion area. For the proposed Project these would be the areas used for mining, processing materials, and storing materials as well as the support facilities.

There is confusing information presented on the locations of current and proposed tortoise exclusion fencing. Figure 4 in the BRA shows exclusion fencing as existing around the previous and proposed mine sites on the northwest, northeast, and south sides with no exclusion fencing on the southwest side. Figure 3 in the Mine Reclamation Plan for the Essex Sand & Gravel Mine Ca Mine ID#91-36-0120 labels “proposed desert tortoise fence” in the legend but on the figure there is additional wording that says “existing tortoise exclusion fence to be removed.” Please clarify in the BRA, the Mine Reclamation Plan, and the Initial Study/MND where tortoise exclusion fencing was in the past, if removed when this occurred, where it is to remain, and new location(s) for construction and maintenance of the exclusion fence. Given the age of existing exclusion fencing that should have been constructed in 1994, it should be inspected and may need to be replaced.

Skanska Essex Mine Initial Study & Mitigated Negative Declaration

Most of the Council’s comments on the BRA also apply to the Initial Study/MND. This is because the findings and recommendations in the Initial Study/MND appear to have been copied from the BRA and pasted into the Initial Study/MND. We say “most” because the recommendation for the tortoise in the BRA was not included in the Initial Study/MND – to conduct pre-construction surveys for the tortoise (see pages 16 and 42 of the BRA).

The Council requests that the County require pre-construction surveys for the tortoise, otherwise known as clearance surveys, following USFWS’s clearance survey protocol (USFWS 2009a). Please see our comments under page 44 above for additional information on clearance surveys.

Page 10: Under “Additional Approval Required of Other Public Agencies,” please add that CDFW and USFWS may need to approve the proposed Project through issuance of incidental take permits for compliance with CESA and FESA. This authorization may be required because tortoise sign was found in the proposed Project area and adjacent to the proposed Project. Thus, implementation of the proposed project would result in the loss of tortoise habitat identified as necessary for the survival and recovery of the tortoise (USFWS 1994a, 1994b). Also, tortoise sign was found when conducting partial or incomplete presence-absence surveys for the tortoise. If presence-absence surveys had been completed for the entire action area, more tortoise sign may have been found, especially because the surveys would have included undisturbed tortoise habitat on the northeast and east sides of the proposed Project area. Please see our comments above on the BRA (page 6, 9, and 15 of this letter) that discuss tortoise sign and tortoise burrows.

Page 20, Air Quality: “To limit dust production, the Applicant must comply with Rules 402 nuisance and 403 fugitive dust, which require the implementation of Best Available Control Measures (e.g. water will be sprayed on working mine areas and onsite access roads regularly with increased frequency during windy conditions; un-surfaced haul and access roads will also be managed for dust control through regular watering or by applying road base material as needed) for each fugitive dust source.”

The County should add a requirement to any permit/authorization that it issues that the amount of water used for dust suppression should be such that it does not result in the formation of puddles or standing water. Standing water attracts tortoise predators to the area and increases the predation pressure on the tortoise population in the area of the proposed Project. This is a standard Best Management Practice for the tortoise that has been required for many years and routinely included as a requirement in construction/surface disturbance projects. “BMPs to discourage the presence of ravens onsite include trash management, food management, removal of road-killed animals on the project site, elimination of available water sources including puddles of water, designing structures to discourage potential nest sites, use of hazing to discourage raven presence, removing inactive nests in the project area, and active monitoring of the site for raven presence.” (DTC 2017).

Page 21, Air Quality – c) Expose sensitive receptors to substantial pollutant concentrations?

“The Proposed Project is located in the north desert region of a remote area of San Bernardino County with no residences or recreational areas in the immediate vicinity. The nearest occupied residential structure is approximately 6 miles southwest of the Project Site. No sensitive receptors are located within the Project vicinity. Therefore, no significant impacts are identified or are anticipated, and no mitigation measures are required.”

Remoteness does not mean that sensitive receptors are not present. Because residences and recreational areas are named, we presume these are sensitive receptors. Vegetation and wildlife would also be sensitive receptors and the impacts of air quality, specifically fugitive dust, on wildlife and plants is not discussed or analyzed in the Initial Study/MND.

The Council requests that the impacts of fugitive dust from the operation of the proposed Project be analyzed under Air Quality. For example, the impacts to native vegetation and soil crusts can be severe. Dust has been shown to increase leaf temperatures and subsequent photosynthetic rates during early spring and may require an increased amount of water for growth and successful

reproduction. If this increased amount of water is not available, plants may respond by reducing plant vigor and by reducing flower and seed production or abandoning reproduction for the year. Please see our comments on the impacts of fugitive or anthropomorphic dust on native plants on page 10 of this comment letter. Soil crusts are degraded or destroyed by mining activities.

Soil crusts, also referred to as cryptobiotic soil crusts, are organic crusts that form on soil surfaces in southwestern deserts including the Mojave Desert. They are assemblages of algae, cyanobacteria, bacteria, lichens, and mosses and various metabolic by-products cemented into a semi-permeable soil surface. These soil crusts perform a variety of functions including enhancing soil surface stabilization (Fletcher and Martin 1948; Loope and Gifford 1972; Blackburn 1975; Rogers 1977; Brotherson and Rushforth 1983; Graetz and Tongway 1986; as cited in DeFalco 1995) and soil building and retention (Reynolds et al. 2001). Once disturbed, soils in the Mojave Desert are easily eroded by wind and water. When removed via mining activities, their functions of soil surface stabilization and soil building and retention are lost resulting in the production of anthropomorphic dust (dust).

The County is requiring the Applicant to use water to limit dust production during mining activities and road use. However, watering disturbed soil surfaces that no longer have intact soil crusts to stabilize the soil is a temporary method to minimize dust. Once the soil surface dries there is no soil crust present to prevent dust from occurring even during a light wind. Because the Applicant will not be onsite daily or consistently based on past use of the Project area, watering would not occur when there is no mining activity. This time could be several days, several months, or longer. But there would be production of dust from the earlier destruction of intact soil crusts.

Under a typical wind speed of 10 mph, larger dust particles that are 30 to 100 μm (PM-30 to PM-100) in diameter are likely to settle within a few hundred feet from the source. Smaller particles, (e.g., PM-10) have much slower gravitational settling velocities and are much more likely to have their settling rate decreased by atmospheric turbulence¹. Thus, they may be transported greater than a few hundred feet from the source under a typical wind speed of 10 mph. Greater wind speeds would transport these dust particles farther. Thus, the action area for the proposed Project that “encompasses all areas that may be impacted” (according to the definition) would need to extend at least a few hundred feet beyond the proposed Project to capture the distance that larger dust particles or fine dust particles produced during mining operations and from construction and use of access roads would be transported before settling on vegetation and adversely affecting their respiration, growth, reproduction, and survival.

These are the impacts to vegetation and the areal extent of their impacts unless all the anthropogenic dust produced directly or indirectly because of mining activities is halted routinely at its source. Please analyze the direct and indirect impacts of dust deposition on native vegetation and wildlife including the tortoise from the discontinuous operation of the proposed Project and identify effective mitigation that the Applicant is required to implement to mitigate these impacts in the action area.

¹ <http://www.epa.gov/ttnchie1/ap42/ch13/final/c13s02.pdf>

Pages 22, Biological Resources – Would the project: a) Have substantial adverse effects, 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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

“No State and/or federally listed threatened or endangered species or other sensitive species were observed on-site during surveys.”

On page 41 of the BRA, the tortoise is one of 17 species of animals reported in Table 1. “Species Observed On-Site.” Because the tortoise was observed on-site along with four tortoise burrows and a carcass, the data indicate that the Project area is used by the tortoises. Because there is no federal nexus for the proposed Project, the County should condition the CUP so that the Applicant must obtain an incidental take permit to comply with FESA and CESA before initiating any ground disturbance or vehicle use.

Pages 22-23, Biological Resources – Would the project: a) Have substantial adverse effects, 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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

The County states that “protocol surveys were completed July 2023 for this species [desert tortoise] using the 2018 USFWS Desert Tortoise Protocol.”

Please see our comments above on pages 11-13 of this letter under “Page 4: “Information contained in this document is in accordance with accepted scientific and technical standards that are consistent with the requirements of the United States Fish and Wildlife Service (USFWS) and CDFW.” In these comments we strongly disagree with the statement that protocol surveys were completed for the tortoise and provide our reasons for this conclusion including failure to conduct the survey in the entire action area as defined in the Code of Federal Regulations. We referenced the most recent protocols (USFWS 2019) for presence-absence surveys.

Pages 22-23, Biological Resources – Would the project: a) Have substantial adverse effects, 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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Special Status Species: Four special status species are mentioned in the Initial Study/MND –

The desert tortoise, western burrowing owl, desert kit fox, and American badger. In our comments on the BRA, we noted that the legal status of three species needs to be revised and two species added whose distributions overlap the proposed Project area and adjacent areas. These species include the Monarch butterfly and its proposed listing under FESA, the uplisting of the tortoise to endangered under CESA, candidate status of the western burrowing owl and LeConte’s thrasher under CESA, and the protections afforded the desert kit fox under California Fish and Game Code. Please see our comments on pages 7 and 8 of this letter for additional information. We request that the BRA and the Initial Study/MND be updated to include these species, implement surveys that may be required/may have changed with this change in their legal status and the results, and a description and analysis of the potential impacts to these species from the proposed Project added to the BRA and Initial Study/MND.

Page 23, Biological Resources – Would the project: a) Have substantial adverse effects, 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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

“Scutes were not peeling off the bone, and the shell was mostly complete. The shell was cracked, and no spinal cord was present. No other desert tortoise signs were observed.” This sentence is followed by “Additionally, the tortoise survey identified additional suitable burrows that were not occupied.”

The statement that no other desert tortoise signs were observed followed by a sentence that reported the presence of tortoise burrows, which are a form of tortoise sign, is not logical. The County should correct this information in the Initial Study/MND. If the information was derived from the BRA, the BRA should be corrected to indicate that tortoise sign was found in the limited area surveyed for tortoise presence-absence. Tortoise burrows were found in both the proposed Project area and previous project area and a tortoise carcass in the previous project area.

“The BRA concluded that although the burrowing owl was absent from the Project Site during the survey, there is suitable habitat within the Project Site. As such, preconstruction surveys are necessary for this species as required in Mitigation Measure BIO-1 below and shall follow the recommended guidance from the CDFW.”

Surveys to gather information on the occurrence of the western burrowing owl in the vicinity of a proposed project is not mitigation. It is a method of collecting data on whether the species uses the project area and adjacent areas. After the data are collected, then the County would determine whether the proposed Project would adversely impact the species directly or indirectly, and if so, how and to what extent. If adverse impacts would occur, then appropriate effective mitigation would be identified and should be required by the County to achieve the status of a Mitigated Negative Declaration under CEQA. Please correct this labeling of surveys as mitigation in the Initial Study and in the BRA.

“The BRA determined that although the Desert Kit Fox was not observed during the field survey, the Project Site provides suitable habitat for this species as some burrows of suitable size or shape were observed. Mitigation Measure BIO-2 will reduce potential impacts to this species to less than significant.”

Mitigation Measure BIO-2 is “Prior to any ground disturbing activities, a pre-construction survey for the Desert Kit Fox shall be conducted by a qualified biologist. The surveys shall be conducted during the appropriate times to observe the target species and using the most current survey protocol.”

Surveys to gather information on the occurrence of desert kit fox in the vicinity of a proposed project is not mitigation. It is a method of collecting data on whether the species uses the project area and adjacent areas. After the data are collected, then the County would determine whether the proposed Project would adversely impact the species directly or indirectly, and if so, how and to what extent. If adverse impacts would occur, then appropriate effective mitigation would be identified and should be required by the County to achieve the status of a Mitigated Negative Declaration under CEQA. Please correct this labeling of surveys as mitigation in the Initial Study and in the BRA.

“The BRA determined that although the American Badger was not observed during the field survey, the Project Site contains suitable habitat for this species (i.e., burrows of suitable site and shape). Mitigation Measure BIO-3 will reduce potential impacts to this species to less than significant.”

Mitigation Measure BIO-3 is “Prior to any ground disturbing activities, a pre-construction survey for the American Badger shall be conducted by a qualified biologist. The surveys shall be conducted during the appropriate times to observe the target species and using the most current survey protocol.”

Surveys to gather information on the occurrence of the American badger in the vicinity of a proposed project is not mitigation. It is a method of collecting data on whether the species uses the project area and adjacent areas. After the data are collected, then the County would determine whether the proposed Project would adversely impact the species directly or indirectly, and if so, how and to what extent. If adverse impacts would occur, then appropriate effective mitigation would be identified and should be required by the County to achieve the status of a Mitigated Negative Declaration under CEQA. Please correct this labeling of surveys as mitigation in the Initial Study and in the BRA.

Pages 23-24, Biological Resources – Would the project: a) Have substantial adverse effects, 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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

The Initial Study/MND lists BIO-1 through BIO-4 as mitigation measures for the burrowing owl, kit fox, badger, and nesting birds. The “mitigation measures” appear to have been copied from the recommendations in the BRA. Absent is a similar recommendation made in the BRA for the tortoise. On page 16 of the BRA under Conclusions and Recommendations, the BRA concludes that the site contains tortoise habitat and tortoises have been documented within the region, and recommends completing pre-construction surveys “prior to any ground-disturbing activities or desert tortoise fence installation.” This recommendation is repeated on page 42, in Table 2 of the BRA. The County should explain in the Initial Study/MND the adoption of all recommendations from the BRA except for the one for the tortoise.

Page 24, Biological Resources – Would the project: a) Have substantial adverse effects, 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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

“Implementation of the above mitigation measures would ensure potential impacts to any species identified as a candidate, sensitive or special status species by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, would be reduced to less than significant.”

This conclusion by the County is made with no supporting documentation from the scientific literature. We found no information in the BRA or the Initial Study/MND of any potential impacts to the four wildlife species of special concern or analysis of these impacts. In our comments on the BRA, we listed several indirect impacts to the tortoise/tortoise habitat that would occur from implementing the proposed Project and requested that the County analyze them (please see our comments on pages 10 and 11 of this letter). We make this same request to provide this information in the Initial Study/MND.

As previously stated, the “above mitigation measures” are not mitigation but methods to gather information on the use of the proposed Project and adjacent areas by species of special concern. Once their use is determined then the County can analyze the potential impacts of the proposed Project to the species and develop appropriate effective mitigation. We found no references from the scientific literature to support the conclusion that these surveys are mitigation – no demonstration in the Initial Study/MND that the County used the best scientific information available as required by CEQA.

In addition, Mitigation Measures BIO-1 through BIO-4 improperly defer both the analysis of impacts and the formulation of mitigation to the post-approval period. CEQA permits the details of mitigation to be developed after project approval only where the agency commits to specific, enforceable performance standards that the deferred measures must achieve [CEQA Guidelines § 15126.4(a)(1)(B)]. Here, these measures commit only to conducting surveys “using the most current survey protocol” at an unspecified future date, with no performance standards, no thresholds for determining significance, and no identified mitigation to be applied if the species are found. This is impermissible deferral: the surveys are the analysis that CEQA requires before approval, not mitigation that follows it. Please complete the surveys and the impact analysis, and identify enforceable mitigation with measurable performance standards, in the CEQA document before the County acts on the proposed Project.

In addition, not all species currently protected under CESA or proposed/listed under FESA whose distributions include the Project area are identified or impacts identified and analyzed in the BRA, and therefore not included in the Initial Study/MND. The CEQA document should be updated to include these species that have been added since the BRA was written in 2023.

Page 27, Biological Resources – Would the project: d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

“According to the BRA the Project Site is not mapped within an area for wildlife movement. Additionally, the site is not within a desert linkage as mapped by the Mojave Desert Land Trust. Therefore, the Proposed Project is not anticipated to impede the use of a wildlife corridor. In addition, in the long-term the Project Site would be backfilled and revegetated to return the area to OS. Therefore, less than significant impact is identified or anticipated, and no mitigation measures are required.”

Identification of linkage habitats for the tortoise may be found in Gray et al. (2019) and more recently in Averill-Murray et al. (2021). Linkage habitats for species in the California Desert may be found in Penrod et al. (2012). Thus, there are several data sets available that show locations for connectivity habitat.

We are also concerned that the County treats the eventual backfilling and revegetation of the site as though it restores the area’s ecological function, and thereby avoids a significant impact. Reclamation of a mined site is not equivalent to restoration of ecological function. Revegetation to “open space” does not re-establish the biological soil crusts, native perennial and annual forage, wash hydrology, and undisturbed cover that tortoises require. The scientific literature indicates that these desert systems recover slowly and are prone to type-conversion following surface disturbance: biological soil crusts that stabilize soils and support nutrient cycling are readily

destroyed and slow to reestablish (Belnap 2002); disturbed desert surfaces are colonized by non-native invasive annual grasses that displace native forage and alter fire regimes (Brooks and Esque 2002, Brooks and Berry 2006, Drake et al. 2016); and natural recovery of Mojave and Colorado Desert ecosystems from surface disturbance occurs over decades to centuries (Lovich and Bainbridge 1999). These processes are unlikely to be reversed by revegetation within a meaningful timeframe, particularly over the Project's approximately 50-year authorization and under increasing climate stress. Please evaluate the Project's impacts on the ecological function and connectivity of this portion of the Chemehuevi Critical Habitat Unit/Tortoise Conservation Area, and do not rely on reclamation and revegetation as evidence that habitat function will be restored.

Page 27, Biological Resources – Would the project: e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

“Based on the literature review and field survey, no State and/or federally-listed threatened or endangered species were documented or are expected to occur on the Project Site. Additionally, no plant species with the California Rare Plant Rank (CRPR) of 1 or 2 were observed on-site or documented to occur on-site. No other sensitive species were observed within the Project Site or buffer area.”

The statement that “no State and/or federally-listed threatened or endangered species were documented ... on the Project Site” is not accurate. The multi-species reconnaissance-level survey and limited presence-absence survey for the tortoise found tortoise sign in the proposed Project area and previous project area (tortoise burrows in the former and a tortoise carcass in the latter). So, the tortoise was documented as using the proposed Project area and previous project area. Please see our additional comments on this issue on page 6 under “Tortoises spend much of their lives in burrows . . . “ in this letter regarding the difficulty in observing tortoises because of their cryptic coloration and behavior and using tortoise sign to indicate use of an area by tortoises.

The statement that tortoises are not expected to occur is unsupported. With respect to the statement that “no State and/or federally-listed threatened or endangered species . . . are expected to occur on the Project Site” this statement is also not correct. The BRA identified habitat for the tortoise and the western burrowing owl as occurring on the Project site (see pages 14 and 17 of the BRA) and that tortoises are known to occur in the region (page 17 of the BRA).

Habitat for the burrowing owl was reported as occurring in the proposed Project area and the owl is afforded protection under CESA. The field survey conducted at the proposed Project area did not implement CDFW's survey protocol for the burrowing owl to determine whether the species used the proposed Project area or adjacent areas. Until these surveys are conducted the statement that they are not expected to occur cannot be supported, especially with habitat present for the species.

For LeConte's thrasher, the vegetation in the “restored wash” in the previous project area (immediately adjacent to the proposed Project area) was described in the BRA and the Mine Reclamation Plan for the Essex Sand & Gravel Mine Ca Mine ID#91-36-0120, and this habitat appears to match the habitat used by LeConte's thrasher. Thus, habitat for the thrasher likely occurs in the previous project area immediately adjacent to the proposed Project area. The LeConte's thrasher is afforded protection under CESA. Please see additional comments on this issue on pages 7 and 8 of this letter.

Regarding rare plants, the BRA clearly states that “survey timing was outside the floristic period for rare plants.” Until surveys for rare plants are conducted at the appropriate time and by qualified botanists, the County cannot claim that no rare plants occur on the proposed Project site or nearby. In addition, in Appendix D, Table 2, the BRA lists animal species that have been recorded from the vicinity of the proposed Project as provided by California Natural Diversity Database (CNDDB). However, we found no corresponding information in this table for plants with designations by California Native Plant Society (CNPS). Please add this information to this table and include an analysis of the potential impacts to the plants species as identified from literature searches and database searches.

Page 28, Biological Resources – f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?

First, “The Project Site is not located within a state habitat conservation plan or natural community conservation plan,” followed by, “The Project Site is within the Northern and Eastern Colorado Desert Coordinated Management Plan (NECO). NECO amends the 1980 California Desert Conservation Area (CDCA) plan.”

Because the County included a BLM resource management plan in the information provided in the CEQA document, the County should also include that the proposed Project is located in the Chemehuevi Tortoise Conservation Area and Chemehuevi Critical Habitat Unit for the tortoise, both designated by the USFWS. The BRA reported that the proposed Project is in designated tortoise critical habitat.

The Chemehuevi Tortoise Conservation Area (previously called a DWMA) was identified by the USFWS in the recovery plans for the tortoise (USFWS 1994b, USFWS 2011) as an area that contains a population that should be managed for the conservation or recovery of the tortoise. The critical habitat designation by the USFWS identified specific areas essential to the conservation of a species (USFWS 1994a), in this case, essential for the conservation or recovery of the tortoise. We use “conservation” and “recovery” as synonyms because the FESA defines conservation as “use and the use of all methods and procedures which are necessary to bring an endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary,” i.e., the species is recovered and removed from the list of endangered and threatened species” (USFWS 1994a).

In 2016 BLM amended the CDCA Plan with the adoption to the Desert Renewable Energy Conservation Plan (DRECP) Land Use Plan Amendment (LUPA)². To provide an example of the importance of tortoise populations in Tortoise Conservation Areas and the importance of habitat in critical habitat, if the proposed Project occurred on BLM land, BLM would require compensation for the affected habitat at a rate of 5:1 provided that the USFWS determined the proposed Project would not destroy or adversely modify critical habitat.

Additionally, in the 2016 DRECP (BLM 2016), BLM placed a cap on the area of future land disturbance that could occur in each Tortoise Conservation Area. Please add this information to the Initial Study/MND.

² <https://eplanning.blm.gov/Documents/?id=dac3d291-a7f2-f011-8407-001dd80db62a&spid=ae1a3c4d-a8f2-f011-8407-001dd80c29f3>

Page 28, Biological Resources – f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?

The County concludes that for this question, the answer is “Less Than Significant Impact. Therefore, no significant adverse impacts are identified or anticipated with the implementation of mitigation measures.”

We found no analysis or explanation of how the County arrived at this conclusion and no supporting documentation in the Initial Study/MND for this conclusion/determination. The County mentions BLM’s CDCA Plan but provides no information on its requirements for the area in which the proposed Project occurs. The County should add information about critical habitat provided in the BRA, and update the information provided in our comments about the significance of the Tortoise Conservation Area and critical habitat for the conservation of the tortoise, then analyze how the proposed Project would affect the designations by BLM and USFWS for the tortoise. Please update the Initial Study/MND to include this and other relevant information, conduct an analysis using this information, and present a supported conclusion.

Page 50, Land Use Planning – Would the project: b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

“The Proposed Project is consistent with the Countywide Policy Plan zoning of RC [resources conservation area]. Although the Project Site is not located in a Mineral Resource zone for industrial minerals, it would not conflict with the Countywide Policy Plan as mining is conditionally permitted within the RC zone. The Project Site is not located within or near an environmental justice area.³² The Project Site is surrounded by vacant land. The Proposed Project would not cause a significant environmental impact due to conflict with any land use plans or policies. No significant impacts are identified or anticipated, and no mitigation measures are required.”

Although the County made the determination of “No impact,” it should not conclude that the operation of a mine in an area zoned as a Resource Conservation Area constitutes no impact. As provided earlier in this comment letter, there are several potential impacts to the tortoise that would occur. The BRA and Initial Study/MND do not describe or analyze impacts to the tortoise or other listed or proposed species with habitat on and adjacent to the Project area. The location of the Mine in a Tortoise Conservation Area and designated critical habitat unit by the USFWS, and the management prescriptions for the area by BLM in their amended CDCA Plan under the DRECP (2016) for conservation of the tortoise are not consistent with operating a mine. (See our comments above under “Page 28, Biological Resources – f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?” on page 26 and 27 of this letter for additional comment on this issue.) The County should revise its conclusion/determination and support it with all information related to planning and land management in the vicinity of the proposed Project.

Page 54, Noise – Would the project result in: b) Generation of excessive ground-borne vibration or ground-borne noise levels?

“Vibration would be generated as a result of the mining activities described above. There would be no drilling and blasting at the Project Site. As noted, the nearest occupied structure is a residence approximately 6 miles from the site. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.”

Please explain the County’s assumption that noise only impacts people. Noise also adversely impacts wildlife. It is an invisible source of habitat degradation.

Tortoises have well-developed inner ears and respond to ground vibrations (Miles 1953). Vibrational and noise stimuli from motorized vehicles on roads adversely affect tortoises (Ruby et al. 1994). Noise and vibrations have potentially significant effects on the desert tortoise's behavior, communication, and hearing. As mentioned in our comment on page 10 of this letter, noise and vibration can result in tortoises leaving their burrows (Medica et al. 1986) exposing them to predation and temperature extremes. Noise and vibration increase stress levels in tortoises and prevent them from hearing approaching terrestrial predators (Bowles et al. 1999). Thus, the noise from a nearby mine may result in higher mortality of tortoises.

The noise generated by heavy equipment during construction or continual traffic on a busy highway would cause defensive behaviors by tortoises of stopping movement and withdrawing into their shells (Ruby et al. 1994). The critical level for damage to tortoises from high-amplitude sounds (e.g., off-road vehicle noise, blasts from construction, etc.) over a lifetime is the same as for humans despite their less sensitive hearing (Bowles et al. 1999). Thus, the short-term and long-term effects of noise produced from construction projects including certain types of operations and maintenance activities adversely impacts the desert tortoise with respect to behavior and short-term auditory damage and likely has more severe long-term impacts to hearing.

Adverse impacts from recurring sources of noise pollution (e.g., blasting, heavy equipment operations, etc.) may include collapsed burrows, alterations in behavior (Ruby et al. 1994), and short-term and long-term auditory damage (Bowles et al. 1999) that leave tortoises more susceptible to predation. In addition, outbreaks of disease are caused/contributed to by increased chronic environmental stress from increased amplitude, frequency, and/or duration of noise levels.

Birds are impacted in numerous ways by noise. These include (1) physical damage to ears; (2) stress responses; (3) fright-flight responses; (4) avoidance responses; (5) changes in other behavioral responses, such as foraging; (6) changes in reproductive success; (7) changes in vocal communication; (8) interference with the ability to hear predators and other important sounds; and (9) potential changes in populations (Ortega 2012).

The impacts of noise including ground vibrations should be analyzed in the CEQA document on wildlife species including special status species such as the tortoise, burrowing owl, kit fox, other species protected under CESA, nesting/resident birds, etc. either in this section or in the Biological Resources section of the CEQA document. After conducting this analysis, the County should make their determination regarding the impacts of noise on the environment with respect to CEQA.

Page 70, Mandatory Finding of Significance – a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

“A BRA was prepared. Based on the field survey, no live desert tortoises were observed within the Project Site. Additionally, the tortoise survey identified additional suitable burrows that were not occupied.”

USFWS protocol level surveys for the tortoise (USFWS 2019) were not implemented. The entire action area was not surveyed. Tortoise sign was found on the Project site; this indicates that tortoises use the Project area. Please see our earlier comments under “Page 23, Biological Resources” of the Initial Study/MND and “Page 4” in the BRA. A tortoise uses several burrows throughout the year (see our comments on the BRA under “Page 14 and Page 25, Figure 4”). Finding unoccupied tortoise burrows does not indicate absence of use of the Project area; in fact, finding any evidence of tortoises, including inactive burrows, is an indication of tortoise occupancy.

The Mandatory Finding of Significance section should be revised to present information on all species protected under CESA and proposed or listed under FESA whose distribution overlaps the proposed Project area. This includes the western burrowing owl, LeConte’s thrasher, and Monarch butterfly. As part of the revision, the County should describe and analyze potential impacts to these species and their habitats (we did not find this information in the Initial Study/MND or the BRA) at both the local level and regional level.

“The Project Site is not mapped within an area for wildlife movement and is not within a habitat conservation plan.”

The Project site is not mapped within an area of wildlife movement because for the tortoise it is located in [emphasis added] an area identified for the conservation of the tortoise, the Chemehuevi Tortoise Conservation Area (USFWS 2011), Chemehuevi Critical Habitat Unit (USFWS 1994a), and Chemehuevi Area of Critical Environmental Concern (BLM 2016).

“To minimize potential impacts to the biological resources occurring on the site, including special status species, Mitigation Measures BIO-1 to BIO-5 shall be implemented as per CDFW and USFWS requirements.”

BIO-1 through BIO-4 are not mitigation measures. They are surveys that the County should have required the Applicant to conduct so the results, along with other data, would be used in the analysis of impacts to biological resources. This comment was made earlier in this letter and in several recent comment letters submitted to the County including Kramer Junction Travel Stop, LCM Railroad, Landers Hotel, and Tentative Tract Map 20577 projects in 2025 and 2026.

“Implementation of the above mitigation measures would ensure potential impacts to any species identified as a candidate, sensitive or special status species by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, would be reduced to less than significant.”

We found no information in the BRA or the Initial Study/MND to support this conclusion/finding. In addition, the BRA and Initial Study/MND did not include all species protected under CESA or proposed/listed under FESA whose distributions overlap the Project area. Please revise this CEQA document to include current information on these species/habitats and analysis of potential impacts to these species with information that is supported by scientific research. These actions are needed to comply with CEQA's requirement that agencies use the best scientific information available in their analysis and in preparing CEQA documents.

Pages 69-71, Mandatory Finding of Significance – b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

We were unable to find the County's information, analysis, and conclusion/finding for this CEQA question for biological resources. We request that the Initial Study/MND be revised to include this information.

The absence of a cumulative impacts analysis for biological resources is itself a deficiency under CEQA, which requires the County to consider whether the Project's incremental effects are cumulatively considerable when viewed together with the effects of past, current, and probable future projects (CEQA Guidelines §§ 15130, 15355). The relevant cumulative context is the continued incremental loss and degradation of desert tortoise habitat within the Chemehuevi Critical Habitat Unit and the Colorado Desert Recovery Unit—a recovery unit in which most populations are already at or below the density needed for viability (Allison and McLuckie 2018) – together with the indirect impacts of regional development and vehicle traffic along Interstate 40 and the National Trails Highway (subsidized predators, invasive plants, dust, noise, and habitat fragmentation) described above. Please prepare a cumulative impacts analysis for biological resources that accounts for other projects and activities affecting this critical habitat unit and recovery unit, and support the resulting determination with substantial evidence.

To assist the County in answering these two questions regarding the impacts to the tortoise from the operations and maintenance of the proposed Project, we are attaching "Appendix A – Demographic Status and Trend of the Mojave Desert Tortoise including Tortoises in the Colorado Desert Recovery Unit." Note that the proposed Project is in the Colorado Desert Recovery Unit (USFWS 2011). Most of the tortoise populations in this Unit are below the density needed for population viability (Allison and McLuckie 2018). The adult tortoise population declined by about 36 percent in the recovery unit and 64 percent in the Chemehuevi Critical Habitat Unit/Tortoise Conservation Area between 2004 and 2014 (Allison and McLuckie 2018), and the density of tortoises continues to decline or not improve in this recovery unit (USFWS 2025). Also note that the tortoise cannot achieve recovery, that is, be removed from the list of endangered and threatened species under FESA unless it achieves recovery in all five recovery units including the Colorado Desert Recovery Unit (USFWS 2011). This includes having viable populations.

We conclude that having populations at or below the threshold for the density needed for population viability means these populations are below the level needed to be self-sustaining or on the edge of not-being self-sustaining, and any additional impacts to these populations would exacerbate this declining trend and send the population density levels below the level of self-

sustaining. Using the information in this Appendix, we conclude the answer to these two questions is “yes,” which means the impacts from the proposed Project would be significant without effective mitigation to offset the numerous adverse impacts to the tortoise (see our comments on the BRA on pages 10 and 11 of this letter). We found no mitigation identified for the tortoise other than the construction of tortoise exclusion fencing, which prevents direct mortality. It does not mitigate the indirect impacts of the proposed Project. Please include this information in the County’s analysis of the Project in the CEQA document.

Because the County has prepared an Initial Study/MND, this document should include discussion on mitigation and monitoring including information from the scientific literature that the implementation of the proposed mitigation and monitoring actions will reduce the level of impacts from the operations and maintenance of the proposed Project to less than significant. However, until the County (1) determines the extent of use of the Project site and surrounding area by tortoises and species listed/proposed for listed under FESA and species protected under CESA; (2) determines the type and extent of the direct, indirect, cumulative, synergistic, and growth-inducing impacts to these species and their habitats from the operations and maintenance of the proposed Project; and (3) analyzes these impacts, the County is unable to identify the appropriate mitigation and monitoring to offset these impacts. Consequently, the County is currently unable to determine that a mitigated negative declaration is the appropriate CEQA document to prepare for the proposed Project with respect to impacts to the tortoise and other protected species.

A standard mitigation measure for projects in the distribution of the tortoise and that will provide subsidies for tortoise predators as food, water, or substrates for nesting or roosting is to contribute to the National Fish and Wildlife Foundation’s Raven Management Fund for the tortoise. The Applicant should be required to contribute to the National Fish and Wildlife Foundation’s Raven Management Fund for regional and cumulative impacts to the desert tortoise. The amount should be determined following the formula provided by USFWS (2010) including the addition of the annual inflation rate that has occurred for each of the 16 years since the formula and Fund were implemented.

Another standard mitigation measure for projects in the distribution of the tortoise that include the construction of tortoise exclusion fencing in an area previously accessible to/used by tortoises is to install and maintain shade structures along the exclusion fence. Shade structures are needed because tortoise encountering an exclusion fence will pace along the fence trying to get to the other side. This may result in the tortoise overheating (Peaden et al. 2017), which can cause/contribute to death. The design, placement, and monitoring of the shade structures should follow USFWS’s “Shade Structures for Desert Tortoise Exclusion Fence: Design Guidance” (USFWS 2020c) or the latest USFWS guidance.

Regarding significant impacts and cumulative impacts, it appears that the County relied on the “professional opinion” when concluding that the proposed Project will have no significant environmental impact to the identified species and not the best science available. We conclude this because we found no information from the scientific literature in the BRA regarding analysis of impacts to species protected under FESA or CESA and therefore no scientific information to support the County’s determinations in this CEQA document. Thus, the County is not on “solid ground” should their CEQA decision be legally challenged.

Taken together, these comments go to a single overarching concern: we do not believe the administrative record contains substantial evidence sufficient to support the County's determination that the Project's impacts to the desert tortoise and other special-status species would be less than significant. The partial survey effort does not establish an adequate baseline of existing physical conditions (CEQA Guidelines § 15125), and the indirect and cumulative impacts identified above are not analyzed. Where substantial evidence supports a fair argument that a project may have a significant effect on the environment, CEQA calls for the preparation of an environmental impact report (EIR). We respectfully request that the County either prepare an EIR or, at a minimum, revise and recirculate the environmental document after completing the surveys, baseline, impact analysis, and cumulative analysis described in these comments.

We offer to assist the County to work toward a scientifically supported process that the County would implement to comply with the purpose and intent of CEQA in the development of initial studies/mitigated negative declarations with respect to the desert tortoise and other species protected under the FESA and CESA.

We appreciate this opportunity to provide the above comments and trust they will help protect tortoises during any resulting authorized activities. Herein, we reiterate that the Council wants to be identified as an Affected Interest for this and all other projects funded, authorized, or carried out by the County that may affect desert tortoises, and that any subsequent environmental documentation for this project is provided to us at the contact information listed above. Additionally, we ask that the County continue to notify the Council at eac@deserttortoise.org of any proposed projects that may affect the desert tortoise so we may comment on them to ensure the County fully considers and implements actions to conserve these tortoises as part of its directive to conserve biodiversity on lands it oversees in San Bernardino County.

Please respond in an email that you have received this comment letter so we can be sure our concerns have been registered with the appropriate personnel and office for this Project.

Respectfully,



Edward L. LaRue, Jr., M.S.

Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

Attachment – Appendix A: Demographic Status and Trend of the Mojave Desert Tortoise including the Colorado Desert Recovery Unit

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Appendix A

Demographic Status and Trend of the Mojave Desert Tortoise including the Colorado Desert Recovery Unit

Status of the Population of the Mojave Desert Tortoise: The Council provides the following information for resource and land management agencies so that these data may be included and analyzed in their project and land management documents and aid them in making management decisions that affect the Mojave desert tortoise (tortoise).

There are 17 populations of Mojave desert tortoise described below that occur in Critical Habitat Units (CHUs) and Tortoise Conservation Areas (TCAs); 14 are on lands managed by the BLM; 8 of these are in the California Desert Conservation Area (CDCA).

As the primary land management entity in the range of the Mojave desert tortoise, the Bureau of Land Management's (BLM's) implementation of a conservation strategy for the Mojave desert tortoise in the CDCA through implementation of its Resource Management Plan and Amendments through 2014 has resulted in the following changes in the status for the tortoise throughout its range and in California from 2004 to 2014 (**Table 1, Table 2**; USFWS 2015, Allison and McLuckie 2018). The Council believes these data show that BLM and others have failed to implement an effective conservation strategy for the Mojave desert tortoise as described in the recovery plan (both USFWS 1994b and 2011), and have contributed to tortoise declines in density and abundance between 2004 to 2014 (**Table 1, Table 2**; USFWS 2015, Allison and McLuckie 2018) with declines or no improvement in population density from 2015 to 2024 (**Table 3**; USFWS 2016, 2018, 2019, 2020, 2022a, 2022b, 2025). To achieve recovery, the tortoise populations in all five recovery units must meet recovery goals. If the tortoise in one of more recovery units does not meet recovery goals, the tortoise cannot be recovered.

Important points from these tables include the following:

Change in Status for the Mojave Desert Tortoise Range-wide

- Ten of 17 populations of the Mojave desert tortoise declined from 2004 to 2014.
- Eleven of 17 populations of the Mojave desert tortoise are below the population viability threshold. These 11 populations represent 89.7 percent of the range-wide habitat in CHUs/TCAs.

Change in Status for the Colorado Desert Recovery Unit – California

- This recovery unit had a 36.25 percent decline in tortoise density from 2004 to 2014.
- Tortoise populations in four of the seven TCAs in this recovery unit have densities that are below viability as of 2014 (USFWS 1994b).

Table 1. Summary of 10-year trend data for the 5 Recovery Units and 17 CHUs/TCAs for Mojave desert tortoise. The table includes the area of each Recovery Unit and CHU/TCA, percent of total habitat for each Recovery Unit and CHU/TCA, density (number of breeding adults/km² and standard errors = SE), and the percent change in population density between 2004 and 2014. Populations below the viable level of 3.9 breeding individuals/km² (10 breeding individuals per mi²) (assumes a 1:1 sex ratio) or showing a decline from 2004 to 2014 are in red.

Recovery Unit: Designated Critical Habitat Unit ¹ /Tortoise Conservation Area	Surveyed area (km ²)	% of total habitat area in Recovery Unit & CHU/TCA	2014 density/km ² (SE)	% 10-year change (2004–2014)
Western Mojave, CA	6,294	24.51	2.8 (1.0)	–50.7 decline
Fremont-Kramer	2,347	9.14	2.6 (1.0)	–50.6 decline
Ord-Rodman	852	3.32	3.6 (1.4)	–56.5 decline
Superior-Cronese	3,094	12.05	2.4 (0.9)	–61.5 decline
Colorado Desert, CA	11,663	45.42	4.0 (1.4)	–36.25 decline
Chocolate Mtn AGR, CA	713	2.78	7.2 (2.8)	–29.77 decline
Chuckwalla, CA	2,818	10.97	3.3 (1.3)	–37.43 decline
Chemehuevi, CA	3,763	14.65	2.8 (1.1)	–64.70 decline
Fenner, CA	1,782	6.94	4.8 (1.9)	–52.86 decline
Joshua Tree, CA	1,152	4.49	3.7 (1.5)	+178.62 increase
Pinto Mtn, CA	508	1.98	2.4 (1.0)	–60.30 decline
Piute Valley, NV	927	3.61	5.3 (2.1)	+162.36 increase
Northeastern Mojave	4,160	16.2	4.5 (1.9)	+325.62 increase
Beaver Dam Slope, NV, UT, AZ	750	2.92	6.2 (2.4)	+370.33 increase
Coyote Spring, NV	960	3.74	4.0 (1.6)	+ 265.06 increase
Gold Butte, NV & AZ	1,607	6.26	2.7 (1.0)	+ 384.37 increase
Mormon Mesa, NV	844	3.29	6.4 (2.5)	+ 217.80 increase
Eastern Mojave, NV & CA	3,446	13.42	1.9 (0.7)	–67.26 decline
El Dorado Valley, NV	999	3.89	1.5 (0.6)	–61.14 decline
Ivanpah Valley, CA	2,447	9.53	2.3 (0.9)	–56.05 decline
Upper Virgin River	115	0.45	15.3 (6.0)	–26.57 decline
Red Cliffs Desert	115	0.45	15.3 (6.0)	–26.57 decline
Range-wide Area of CHUs - TCAs/Range-wide Change in Population Status	25,678	100.00		–32.18 decline

¹ U.S. Fish and Wildlife Service. 1994b. Endangered and threatened wildlife and plants; determination of critical habitat for the Mojave population of the desert tortoise. Federal Register 55(26):5820-5866. Washington, D.C.

Table 2. Estimated change in abundance of adult Mojave desert tortoises in each recovery unit between 2004 and 2014 (Allison and McLuckie 2018). Decreases in abundance are in red.

Recovery Unit	Modeled Habitat (km ²)	2004 Abundance	2014 Abundance	Change in Abundance	Percent Change in Abundance
Western Mojave	23,139	131,540	64,871	–66,668	–51%
Colorado Desert	18,024	103,675	66,097	–37,578	–36%
Northeastern Mojave	10,664	12,610	46,701	34,091	270%
Eastern Mojave	16,061	75,342	24,664	–50,679	–67%
Upper Virgin River	613	13,226	10,010	–3,216	–24%
Total	68,501	336,393	212,343	–124,050	–37%

Table 3. Summary of data for Agassiz’s desert tortoise, *Gopherus agassizii* (=Mojave desert tortoise) from 2004 to 2024 for the 5 Recovery Units and 17 Critical Habitat Units (CHUs)/Tortoise Conservation Areas (TCAs). The table includes the area of each Recovery Unit and CHU/TCA, percent of total habitat for each Recovery Unit and CHU/TCA, density (number of breeding adults/km² and standard errors = SE), and percent change in population density between 2004-2014 (USFWS 2015). Populations below the viable level of 3.9 breeding individuals/km² (10 breeding individuals per mi²) (assumes a 1:1 sex ratio) (USFWS 1994a, 2015) or showing a decline from 2004 to 2014 are in **red**.

Recovery Unit: Designated CHU/TCA &	% of total habitat area in Recovery Unit & CHU/TCA	2004 density / km ²	2014 density/ km ² (SE)	% 10-year change (2004– 2014)	2015 density / km ²	2016 density / km ²	2017 density / km ²	2018 density / km ²	2019 density / km ²	2020 density / km ²	2021 density / km ²	2024 density /km ²
Western Mojave, CA	24.51		2.8 (1.0)	–50.7 decline								
Fremont-Kramer	9.14		2.6 (1.0)	–50.6 decline	4.5	No data	4.1	No data	2.7	1.7	No data	1.8
Ord-Rodman	3.32		3.6 (1.4)	–56.5 decline	No data	No data	3.9	2.5/3.4*	2.1/2.5*	No data	1.9/2.5*	2.7
Superior-Cronese	12.05		2.4 (0.9)	–61.5 decline	2.6	3.6	1.7	No data	1.9	No data	No data	No data
Colorado Desert, CA	45.42		4.0 (1.4)	–36.25 decline								
Chocolate Mtn AGR, CA	2.78		7.2 (2.8)	–29.77 decline	10.3	8.5	9.4	7.6	7.0	7.1	3.9	7.4
Chuckwalla, CA	10.97		3.3 (1.3)	–37.43 decline	No data	No data	4.3	No data	1.8	4.6	2.6	No data
Chemehuevi, CA	14.65		2.8 (1.1)	–64.70 decline	No data	1.7	No data	2.9	No data	4.0	No data	No data
Fenner, CA	6.94		4.8 (1.9)	–52.86 decline	No data	5.5	No data	6.0	2.8	No data	5.3	No data
Joshua Tree, CA	4.49		3.7 (1.5)	+178.62 increase	No data	2.6	3.6	No data	3.1	3.9	No data	No data
Pinto Mtn, CA	1.98		2.4 (1.0)	–60.30 decline	No data	2.1	2.3	No data	1.7	2.9	No data	No data
Piute Valley, NV	3.61		5.3 (2.1)	+162.36 increase	No data	4.0	5.9	No data	No data	No data	3.9	4.0

Northeastern Mojave AZ, NV, & UT	16.2		4.5 (1.9)	+325.62 increase								
Beaver Dam Slope, NV, UT, & AZ	2.92		6.2 (2.4)	+370.33 increase	No data	5.6	1.3	5.1	2.0	No data	No data	1.7
Coyote Spring, NV	3.74		4.0 (1.6)	+ 265.06 increase	No data	4.2	No data	No data	3.2	No data	No data	2.7
Gold Butte, NV & AZ	6.26		2.7 (1.0)	+ 384.37 increase	No data	No data	1.9	2.3	No data	No data	2.4	No data
Mormon Mesa, NV	3.29		6.4 (2.5)	+ 217.80 increase	No data	2.1	No data	3.6	No data	5.2	5.2	No data
Eastern Mojave, NV & CA	13.42		1.9 (0.7)	-67.26 decline								
El Dorado Valley, NV	3.89		1.5 (0.6)	-61.14 decline	No data	2.7	5.6	No data	2.3	No data	No data	No data
Ivanpah Valley, CA	9.53		2.3 (0.9)	-56.05 decline	1.9	No data	No data	3.7	2.6	No data	1.8	No data
Upper Virgin River, UT & AZ	0.45		15.3 (6.0)	-26.57 decline								
Red Cliffs Desert**	0.45	29.1 (21.4-39.6)**	15.3 (6.0)	-26.57 decline	15.0	No data	19.1	No data	17.2	No data	No data	17.5†
Rangewide Area of CHUs - TCAs/Rangewide Change in Population Status	100.00			-32.18 decline								

*This density includes the adult tortoises translocated from the expansion of the MCAGCC, that are resident adult tortoises and translocated adult tortoises.

**Methodology for collecting density data initiated in 1999.

†Results from 2023; results from 2025 showed an annualize mortality of 26 percent (McLuckie et al. 2025), which means the density is lower than in 2023.

Change in Status for the Mojave Desert Tortoise in California

- Eight of 10 populations of the Mojave desert tortoise in California declined from 29 to 64 percent from 2004 to 2014 with implementation of tortoise conservation measures in the Bureau of Land Management's Northern and Eastern Colorado Desert (NECO), Northern and Eastern Mojave Desert (NEMO), and Western Mojave Desert (WEMO) Plans.
- Eight of 10 populations of the Mojave desert tortoise in California are below the viability threshold for density. These eight populations represent 87.45 percent of the habitat in California that is in CHU/TCAs.
- The two viable populations of the Mojave desert tortoise in California are declining. If their rates of decline from 2004 to 2014 continue, these two populations will no longer be viable by about 2030.

Change in Status for the Mojave Desert Tortoise on BLM Land in California

- Eight of eight populations of Mojave desert tortoise on lands managed by the BLM in California declined from 2004 to 2014.
- Seven of eight populations of Mojave desert tortoise on lands managed by the BLM in California are no longer viable.

Change in Status for Mojave Desert Tortoise Populations in California that Are Moving toward Meeting Recovery Criteria

- The only population of Mojave desert tortoise in California that did not decline is on land managed by the National Park Service, which increased 178 percent from 2004 to 2014.

Important points to note from the data from 2015 to 2024 in Table 3 are:

Change in Status for the Mojave Desert Tortoise in the Western Mojave Recovery Unit:

- The density of tortoises continues to decline in the Western Mojave Recovery Unit
- The density of tortoises from 2015 to 2024 continues to fall below the density needed for population viability.

Change in Status for the Mojave Desert Tortoise in the Colorado Desert Recovery Unit:

- Many of the populations in this recovery unit have densities that are near the threshold for population viability.

Change in Status for the Mojave Desert Tortoise in the Northeastern Mojave Recovery Unit:

- Two of the three population with densities greater than needed for population viability declined to level below the minimum viability threshold.
- Three of the four populations in this recovery unit have densities below the minimum density needed for population viability.

Change in Status for the Mojave Desert Tortoise in the Eastern Mojave Recovery Unit:

- Both populations in this recovery unit have densities below the minimum density needed for population viability.

Change in Status for the Mojave Desert Tortoise in the Upper Virgin River Recovery Unit:

- The one population in this recovery unit is small and appears to have stable densities.

The Endangered Mojave Desert Tortoise: The Council believes that the Mojave desert tortoise meets the definition of an endangered species. In the FESA, Congress defined an “endangered species” as “any species which is in danger of extinction throughout all or a significant portion of its range...” In the California Endangered Species Act (CESA), the California legislature defined an “endangered species” as a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant, which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes (California Fish and Game Code § 2062). Because most of the populations of the Mojave desert tortoise were non-viable in 2014, most are declining, and the threats to the Mojave desert tortoise are numerous and have not been substantially reduced throughout the species’ range, the Council believes the Mojave desert tortoise should be designated as an endangered species by the USFWS. Despite claims by USFWS (Averill-Murray and Field 2023) that a large number of individuals of a listed species and an increasing population trend in part of the range of the species prohibits it from meeting the definitions of endangered, we are reminded that the tenants of conservation biology include numerous factors when determining population viability. The number of individuals present is one of a myriad of factors (e.g., species distribution and density, survival strategy, sex ratio, recruitment, genetics, threats including climate change, etc.) used to determine population viability. In addition, a review of all the available data does not show an increasing population trend (please see Tables 1 and 3).

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