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November 28, 2016

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**Re: Comments on Draft Environmental Impact Report (SCH No. 2012081026) for the Palo Verde Mesa Solar Project (CUP No. 3684 and PUP No. 916)**

Dear Mr. Weiss, Ms. Harper-Ihem, and Mr. Brady:

On behalf of **Citizens for Responsible Solar**, we submit these comments on the Draft Environmental Impact Report (“DEIR”) for Renewable Resource Group’s (“Applicant’s”) Palo Verde Mesa Solar Project (“Project”). The Applicant is seeking a conditional use permit (“CUP”) and public use permit (“PUP”) for the Project. The Project is a solar photovoltaic array that will produce 450 megawatts (“MW”) of electricity and occupy approximately 3,400 acres in the Palo Verde Mesa region of Riverside County. The proposed Project is located approximately five miles northwest of the City of Blythe, north of Interstate 10 (“I-10”), west of Neighbors Boulevard, and north of the Blythe Airport. The Project includes a field of single-axis solar photovoltaic trackers, two on-site substations, an operations and maintenance (“O&M”) building, inverters mounted on concrete pads, underground

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interior collection power lines between inverters and substations, and interior access roads.

The Project also includes a 230 kilovolt (“kV”) transmission line (“gen-tie line”) that will extend 14.5 miles from the Project site to the Colorado River Substation (“CRS”). 2.7 miles of the line would be located on-site. 11.8 miles of the line extends south of the Project site, crosses I-10, then turns west and terminates at the CRS.<sup>1</sup>

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**I. Introduction**

The Project is primarily located in Riverside County, but the gen-tie component is within the the Bureau of Land Management’s (“BLM’s”) Riverside East Solar Energy Zone (“SEZ”), which encompasses areas covered by the Northern and Eastern Colorado Desert Coordinated Management Plan (“NECO Plan”), and the California Desert Conservation Area (“CDCA”).<sup>2</sup> Three immediately adjacent solar power plants have already been approved or are nearing approval for development: Blythe Solar Power Project, (485 MW), Blythe Airport Solar (100 MW), and Blythe Mesa Solar Power Project (485 MW).<sup>3</sup> Beyond the immediate vicinity of the Project, fifteen (15) additional new solar projects are being built, approved, or are pending approval in the Chuckwalla Valley and important wildlife corridors in eastern Riverside County.<sup>4</sup> As each project is developed, the needs of each individual project will unavoidably tax limited air and biological resources to a potentially significant cumulative extent. Furthermore, the lack of sufficient mitigation measures associated with each individual project will inevitably cause cumulative impacts as the projects encroach upon special status species habitat. The final toll taken by this historic energy boom on California’s desert environment, public health, and natural resources, may not be known for several years or longer, but the mounting evidence of detrimental impacts shows that the effects may be severe.

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<sup>1</sup> Riverside County Planning Department, Palo Verde Mesa Solar Project, Draft Environmental

<sup>2</sup> DEIR, Figure 2-2; *Id.* at p. 3.1-3.

<sup>3</sup> *Id.* Figure 3-1 and Table 3-2.

<sup>4</sup> *Id.* Table 3-2.

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Information is now available regarding the impacts that solar pv projects have on sensitive desert mammals and avian species, the strains that project development is having on the state’s limited water and agriculture resources, and the impacts associated with mitigation measures once believed to reduce impacts. The desert environment in and around Blythe has been approved for over 14,000 acres of solar development with little regard for the cumulative impacts these projects will have on the fragile desert ecosystem.<sup>5</sup>

In this case, the Project is a particularly significant threat to biological resources in eastern Riverside County—and the larger Cadiz Valley/Chocolate Mountains ecoregion subarea—because the Project will plug the last gap in a wall of solar projects that will effectively block three wildlife corridors: 1) the Palo Verde Mesa in both east-west and north-south directions, 2) between the McCoy Mountains and the Colorado River, and 3) between the central and southern McCoy Mountains and the Big Maria Mountains.<sup>6</sup> The Project will complete a barrier that stretches 19 miles from north to south and 22 miles from east to west, severing connectivity between special-species habitat located on opposite sides of the wall.<sup>7</sup> As described more extensively in these comments, the DEIR lacks substantial evidence to support the County’s finding that the Project’s cumulatively considerable impacts to biological resources will be mitigated to less than significant. Due to the Project’s position as the last remaining “brick” in the wall that will sever east Riverside County’s wildlife corridors, the Project, even more so than neighboring projects, will result in significant cumulatively considerable impacts to special-status species and connectivity of their habitats.

Now, more than ever, it is essential that the County adequately identify and analyze the Project’s foreseeable direct, indirect, and cumulative impacts. It is also imperative that any and all feasible mitigation measures to reduce significant impacts be presented and discussed. Indeed, CEQA requires nothing less.

As explained below, the Project will generate a multitude of significant, unmitigated impacts on biological resources, hazards and hazardous wastes, and air quality resources. The DEIR mischaracterizes, misanalyzes, underestimates and fails to identify many of these impacts. The DEIR, for example, entirely fails to identify the Project’s role as the final “brick” in the wall sealing off three wildlife

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<sup>5</sup> **Exhibit A:** Scott Cashen Comments, p. 18.

<sup>6</sup> *Id.* at p. 15.

<sup>7</sup> *Id.*



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corridors. Furthermore, many of the mitigation measures described in the DEIR will not mitigate impacts to the extent claimed. In some instances, the mitigation measures may generate additional impacts that are not evaluated. For example, the DEIR proposes eviction of burrowing owls to mitigate significant impacts to the birds. However, the DEIR does not evaluate known, potentially significant impacts associated with owl eviction. The DEIR must be revised to resolve its inadequacies and must be recirculated for public review and comment.

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CEQA requires recirculation of a DEIR for public review and comment when significant new information is added to the DEIR following public review, but before certification.<sup>8</sup> The CEQA Guidelines clarify that new information is significant if “the DEIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the Project or a feasible way to mitigate or avoid such an effect.”<sup>9</sup>

The purpose of recirculation is to give the public and other agencies an opportunity to evaluate the new data and the validity of conclusions drawn from it.<sup>10</sup> As explained more fully below, the DEIR does not comply with the requirements of CEQA because the DEIR 1) fails to set forth a stable and finite project description, 2) fails to set forth the environmental baseline, and 3) fails to identify, analyze, and mitigate to the extent feasible, all the significant impacts that the Project will have on public health, air quality, biological resources, and hazards and hazardous wastes. The County may not approve the Project until an adequate DEIR is prepared and circulated for public review and comment.

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We have reviewed the DEIR and its technical appendices with assistance from technical consultants, whose comments and qualifications are attached as follows: biological resources expert Scott Cashen (**Exhibit A**) and air quality and hazards experts Matt Hagemann and Jessie Jaeger of Soil/Water/Air Protection Enterprise (“SWAPE”) (**Exhibit B**). The County must respond to these consultants’ comments separately and individually.

<sup>8</sup> Public Resources Code (“PRC”) § 21092.1.

<sup>9</sup> CEQA Guidelines § 15088.5.

<sup>10</sup> *Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors* (1981) 122 Cal.App.3d 813, 822.

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**II. Statement of Interest**

Citizens for Responsible Solar is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential health, safety, public service, and environmental impacts of the Project. The association includes Blythe resident George Ellis, Riverside County resident James Hennegan, and California Unions for Reliable Energy (“CURE”) and its members and families and other individuals that live and/or work in east Riverside County.

The individual members of Citizens for Responsible Solar live, work, recreate and raise their families in east Riverside County. They would be directly affected by the Project’s environmental and health and safety impacts. Individual members may also work on constructing the Project itself. They will be first in line to be exposed to any health and safety hazards that may be present on the Project site. They each have a personal interest in protecting the Project area from unnecessary adverse environmental and public health impacts.

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The organizational members of Citizens for Responsible Solar also have an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for the members that they represent. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for businesses to locate and people to live there. This, in turn, jeopardizes future development by causing construction moratoriums and otherwise reduces future employment opportunities for construction workers. The labor organization members of Citizens for Responsible Solar therefore have a direct interest in enforcing environmental laws to minimize the adverse impacts of projects that would otherwise degrade the environment. Finally, the organizational members of Citizens for Responsible Solar are concerned about projects that risk serious environmental harm without providing countervailing economic benefits. The CEQA process allows for a balanced consideration of a project’s socioeconomic and environmental impacts, and it is for the purpose of achieving this balance that we offer these comments.

**III. THE DEIR FAILS TO ADEQUATELY DESCRIBE THE PROJECT**

The DEIR fails to meet CEQA’s requirements because it lacks an accurate, complete, and stable project description, rendering the entire environmental impacts analysis inadequate. California courts have repeatedly held that “an accurate, stable and finite project description is the *sine qua non* of an informative

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and legally sufficient [CEQA document].”<sup>11</sup> CEQA requires that a project be described with enough particularity that its impacts can be assessed.<sup>12</sup> Accordingly, a lead agency may not hide behind its failure to obtain a complete and accurate Project description.<sup>13</sup>

It is impossible for the public to make informed comments on a project of unknown or ever-changing description. California courts have held that “a curtailed or distorted project description may stultify the objectives of the reporting process.”<sup>14</sup> Furthermore, “only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal’s benefit against its environmental cost...”<sup>15</sup> As articulated by the court in *County of Inyo v. City of Los Angeles*, “a curtailed, enigmatic or unstable project description draws a red herring across the path of public input.”<sup>16</sup> Without a complete project description, the environmental analysis under CEQA is impermissibly limited, thus minimizing the project’s impacts and undermining meaningful public review.<sup>17</sup>

O3-5

An accurate and complete project description is necessary to perform an adequate evaluation of the potential environmental effects of a proposed project. In contrast, an inaccurate or incomplete project description renders the analysis of environmental impacts inherently unreliable. Without a complete project description, the environmental analysis under CEQA will be impermissibly narrow, thus minimizing the project’s impacts and undercutting public review.<sup>18</sup>

**A. The DEIR Fails to Adequately Describe Project Decommissioning**

CEQA mandates that lead agencies must include the “whole of an action” that is being approved in the environmental review document’s project description, including *all* components and future activities that are reasonably anticipated to become part of the project.<sup>19</sup> The description must include, but is not limited to,

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<sup>11</sup> *County of Inyo v. City of Los Angeles* (3d Dist. 1977) 71 Cal.App.3d 185, 193.

<sup>12</sup> *Id.* at p. 192.

<sup>13</sup> *See Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311.

<sup>14</sup> *County of Inyo v. City of Los Angeles* (3d Dist. 1977) 71 Cal.App.3d 185, 192.

<sup>15</sup> *Id.* at p. 192-193.

<sup>16</sup> *Id.* at p. 198.

<sup>17</sup> *See, e.g., Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal.* (1988) 47 Cal.3d 376.

<sup>18</sup> *See, e.g. id.*

<sup>19</sup> 14 California Code of Regulations (“CCR”) §15378 (emphasis added).

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“later phases of the project, and any secondary, support, or off-site features necessary for its implementation.”<sup>20</sup> The requirements of CEQA cannot be avoided by chopping a large project into many little ones or by excluding reasonably foreseeable future activities that may become part of the project.<sup>21</sup>

The Project that the Applicant is proposing is “construction, operation, and decommissioning” of a photovoltaic solar array.<sup>22</sup> The DEIR claims that disclosure of significant environmental impacts from “decommissioning” is one purpose of the DEIR.<sup>23</sup> The Applicant is seeking a conditional use permit (“CUP”) for construction, operation, and *decommissioning* [emphasis added].<sup>24</sup> The CUP term is limited to 30 years, at which point the Project components “*would be decommissioned and deconstructed* [emphasis added].”<sup>25</sup> Despite the DEIR’s claim that it “analyzes the impacts of potential decommissioning and dismantling,” the description of the decommissioning and dismantling is woefully incomplete and unstable.

O3-6

First, the DEIR claims that “it is expected” Project components will be “suitable for recycling and reuse,” but offers no certainty that the components will be recycled or reused upon decommissioning and dismantling. The DEIR offers no discussion of wastes that may be produced by the decommissioning process. The DEIR must present a clearer picture of whether Project components will be recycled or reused and, if certain components may not be recycled or reused, the waste stream that decommissioning is likely to generate.

Second, the DEIR fails to offer a timeline for decommissioning even though the DEIR states that decommissioning would require similar “equipment and workforce” as construction. Without a timeline, the public is unable to evaluate the extent of environmental impacts and thus, the current DEIR thwarts the objectives of CEQA. Decommissioning will admittedly involve equipment and personnel similar to construction, and thus decommissioning may lead to the same construction-induced significant impacts that are identified by the DEIR as requiring mitigation, including impacts on biological resources, cultural resources, geology and soils, hazards and hazardous wastes, hydrology and water quality,

O3-7

<sup>20</sup> *Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 283 - 84.

<sup>21</sup> PRC § 21159.27 (prohibiting piecemealing); *see also, Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351, 370.

<sup>22</sup> DEIR, p. ES-1.

<sup>23</sup> *Id.* at p. 1-2.

<sup>24</sup> *Id.* at p. 1-1.

<sup>25</sup> *Id.* at p. 2-34.

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noise, and traffic, among other impacts that have been identified by the DEIR.<sup>26</sup> A revised DEIR must be prepared that sets forth a decommissioning timeline.

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O3-7

Third, the DEIR fails to adequately describe the “restoration” of the site following decommissioning. The DEIR refers to “redistribution, balancing, and conditioning of soils,” but fails to provide support that this generalized “restoration” will achieve “pre-solar facility” conditions.<sup>27</sup> The DEIR fails to assess the impacts of such restoration.

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O3-8

As a result of the DEIR’s single-page treatment of the decommissioning process, the MND fails to describe the full scope of the Project being approved and fails to disclose the full range and severity of the Project’s significant environmental impacts. This is a project-level CEQA document, not a program-level DEIR. The County, as the lead agency, must analyze the whole of the Project in a single environmental review document and may not piecemeal or split the project into pieces for purposes of analysis. The steps and environmental impacts of the decommissioning and restoration phase of the Project must be described and analyzed in a revised and recirculated DEIR, with the fullest degree of detail available, in order to provide the public with sufficient information to permit “an intelligent evaluation of the potential environmental effects of [the] proposed activity.”<sup>28</sup>

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O3-9

**B. The DEIR Fails to Adequately Disclose the Extent of Grading at the Project Site**

The DEIR fails to provide a sufficiently detailed account of what areas will require grading and trenching and the extent of the grading and trenching. This project description information is critical to ensuring that the Project’s impacts can be assessed. According to the DEIR, “[s]ince most of the site has nearly level to gently sloping topography, no mass grading would be required. Some of the parcels where facilities and arrays would be located would require light grubbing for leveling and trenching.”<sup>29</sup> This vague description is incorrect and insufficient to enable an adequate evaluation of impacts for three reasons.

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O3-10

<sup>26</sup> *Id.* at p. ES-5.

<sup>27</sup> *Id.* at p. 2-34.

<sup>28</sup> *San Joaquin Raptor vs. County of Stanislaus*, (1994) 27 Cal. App. 4<sup>th</sup> 713, 730.

<sup>29</sup> DEIR, p. 2-30.



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First, Project construction and operation will require installation of electrical equipment, which necessitates grading and trenching. Indeed, the DEIR states: “[i]nstaLLations of electrical collection system would require excavations to a depth of about three feet for underground electrical circuits.”<sup>30</sup> Furthermore, during Project construction, “tracker assembly may include up to 25 small gas-powered generators to power welding machines to assemble trackers and construct tracker arrays.”<sup>31</sup> The generators would require “micro-pile supports [that] would be driven into the ground to a depth of eight to twelve feet.”<sup>32</sup> However, the DEIR provides no information as to where any of these installations will be located. This is especially disconcerting given the potential presence of hazardous materials and sensitive biological resources on the Project site.

O3-11

Second, the Project will require construction of a significant number of access roads. The DEIR states, “dirt access roads would be constructed within the solar facility site, which would be 12-foot wide and constructed approximately every 200 to 400 feet.”<sup>33</sup> Although the DEIR states that minimal grading for roads would be required, the actual number of access roads planned for the Project indicates that substantial grading would be required. Figure 2-15 of the DEIR illustrates an extensive network of access roads spread across the Project site. Thus, road grading will occur over most of site’s 3,400 acres and, in order to link the site to I-10, access roads will be constructed beyond the site.<sup>34</sup> In addition, the DEIR fails to indicate the location of access roads for constructing the gen-tie line. This omission, when combined with the grading that is implicated by the Project description, indicates a significant amount of ground disturbing activity for roads alone. Furthermore, the DEIR fails to describe the type of grading associated with access road creation.

O3-12

Third, the DEIR indicates that five-acre staging areas will be “typically” set up to service every hundred acres of the Project site.<sup>35</sup> This amounts to approximately thirty-four staging areas. These staging areas require “grubbing and light grading.”<sup>36</sup> The DEIR fails to indicate the location of the staging areas on the Project site. As for the 14.5 mile gen-tie line, though the DEIR indicates staging areas will be required, it fails to describe how many staging areas will be required

O3-13

<sup>30</sup> *Id.*

<sup>31</sup> *Id.* at p. 2 – 31.

<sup>32</sup> *Id.*

<sup>33</sup> DEIR, p. 2 – 24.

<sup>34</sup> DEIR, Figure 2-15.

<sup>35</sup> *Id.* at p. 2 – 31.

<sup>36</sup> *Id.* at p. 2 – 30.

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and their locations.<sup>37</sup> Thus, the DEIR’s description of grading associated with staging areas is incomplete and unstable.

The DEIR’s failure to describe proposed grading for gas-powered generators, access roads, and staging areas renders the DEIR’s grading description inaccurate, incomplete, and unstable, and a revised and recirculated DEIR must be prepared to comply with CEQA.

O3-13

**IV. THE DEIR FAILS TO ADEQUATELY ESTABLISH THE EXISTING ENVIRONMENTAL SETTING AGAINST WHICH ENVIRONMENTAL IMPACTS SHOULD BE MEASURED**

The DEIR describes the existing environmental setting inaccurately and incompletely, thereby skewing the entire impact analysis. The existing environmental setting is the starting point from which the lead agency must measure whether a proposed project may cause a significant environmental impact.<sup>38</sup> CEQA requires the lead agencies to include a description of the physical environmental conditions in the vicinity of a project, as they exist at the time environmental review commences.<sup>39</sup> CEQA defines the environmental setting as the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, from both a local and *regional* perspective.<sup>40</sup>

O3-14

Describing the environmental setting accurately and completely for each environmental condition in the vicinity of the Project is critical to an accurate, meaningful evaluation of environmental impacts. Courts are clear that, “[b]efore the impacts of a Project can be assessed and mitigation measures considered, an [environmental review document] must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined.”<sup>41</sup> In fact, it is:

<sup>37</sup> *Id.* at p. 2 – 32.

<sup>38</sup> *See, e.g., Communities for a Better Env’t v. S. Coast Air Quality Mgmt. Dist.* (March 15, 2010) 48 Cal.4th 310, 316; *Fat v. County of Sacramento* (2002) 97 Cal.App.4th 1270, 1277 (“*Fat*”), citing Remy, et al., Guide to the Calif. Environmental Quality Act (1999), p. 165.

<sup>39</sup> CEQA Guidelines, § 15125(a); *see also Communities for A Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 321; *see also*, 40 C.F.R. § 1502.15.

<sup>40</sup> CEQA Guidelines §15125(a) (emphasis added); *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428, 1453 (“*Riverwatch*”).

<sup>41</sup> *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 952.

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a central concept of CEQA, widely accepted by the courts, that the significance of a Project’s impacts cannot be measured unless the DEIR first establishes the actual physical conditions on the property. In other words, baseline determination is the first rather than the last step in the environmental review process.<sup>42</sup>

The DEIR must also describe the existing environmental setting in sufficient detail to enable a proper analysis of Project impacts.<sup>43</sup> Section 15125 of the CEQA Guidelines provides that “[k]nowledge of the regional setting is critical to the assessment of environmental impacts.”<sup>44</sup> This level of detail is necessary to “permit the significant effects of the Project to be considered in the full environmental context.”<sup>45</sup>

O3-14

The description of the environmental setting in the DEIR is inadequate because it omits highly relevant information regarding biological resources. The County must gather the relevant data and provide an adequate description of the existing environmental setting in a revised and recirculated DEIR.

**A. The Project Fails to Describe the Existing Biological Resources Setting Against which Impacts Should be Measured**

The DEIR’s treatment of the Project’s existing biological resources setting is grossly inadequate. The DEIR 1) relied on surveys that failed to comply with United States Department of Fish and Wildlife (“USFWS”) and the California Department of Fish and Wildlife (“CDFW”) recommendations, 2) relied on habitat assessment and reconnaissance conducted over *five* years ago, 3) relied on data collected for solar array projects other than the Palo Verde Solar Mesa Project, and 4) failed to establish geographic context for the special-status species that occur or have the potential to occur on the Project site. Scott Cashen, a biologist with over 20 years experience and who has been the biological resources expert for over 40 projects, concludes that the DEIR’s failure to accurately and completely describe the existing environmental setting undermines the validity of the County’s impacts analysis.

O3-15

<sup>42</sup> *Save our Peninsula Comm. v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 125.

<sup>43</sup> *Galante Vineyards v. Monterey Peninsula Water Mgmt. Dist.* (1997) 60 Cal.App.4th 1109, 1122.

<sup>44</sup> CEQA Guidelines § 15125(c).

<sup>45</sup> *Id.*

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*i. The DEIR Fails to Adequately Describe the Geographic Context for Cumulative Impact Analysis of Biological Resources*

Considering the particular significance of cumulative impacts in the case of this specific Project,<sup>46</sup> the DEIR’s description of the geographic context for the cumulative impacts analysis of biological resources is seriously flawed. The DEIR describes the geographic context as: “that portion eastern Riverside County [sic] that consists of similar habitat areas as those that would be directly or indirectly affected by the Project.”<sup>47</sup> As Mr. Cashen explains, the DEIR needs to quantify the geographic scope, total amount of each habitat type within the scope, and the total amount of each habitat type that comprises the setting for evaluating the Project’s cumulative impacts.<sup>48</sup> A revised and recirculated DEIR must be prepared that contains sufficient detail on the geographic context for determining the Project’s cumulative impacts on biological resources.

O3-16

*ii. The DEIR Fails to Describe the Existing Setting for Western Burrowing Owl*

As Mr. Cashen points out, the DEIR offers no evidence that protocol-level surveys were conducted for burrowing owl.<sup>49</sup> Though the DEIR alleges that old surveys were carried out in 2011 and 2013, the DEIR fails to include CDFW-recommended survey information, including surveyor names, start and end times, qualifications, and weather conditions.<sup>50</sup> Furthermore, the alleged 2013 survey only covered 323 acres of the 3,400 acre site, and the DEIR fails to justify this limitation.<sup>51</sup> Also, the 2013 burrowing owl survey was incorrectly limited to portions of the Project site that contained vegetation in 2011, which is an inappropriate scope for burrowing owl surveys because burrowing owl may appear in habitat that do not contain vegetation.<sup>52</sup>

O3-17

As Mr. Cashen explains, protocol “detection” surveys are required to sufficiently describe existing conditions, and post-construction “take” surveys, such as those proposed by the DEIR, are an inadequate substitute for pre-construction

<sup>46</sup> See discussion in Section V(C).

<sup>47</sup> DEIR, p. 3.4-50.

<sup>48</sup> **Exhibit A:** Cashen Comments, p. 14 -15.

<sup>49</sup> *Id.* at p. 5 – 6.

<sup>50</sup> *Id.*

<sup>51</sup> *Id.* at p. 6.

<sup>52</sup> *Id.*

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surveys.<sup>53</sup> By failing to implement CDFW and USFWS-recommended protocol surveys, the DEIR fails to establish a complete and accurate existing environmental setting in regards to burrowing owl.

O3-17

*iii. The DEIR Fails to Describe the Existing Setting for Mojave-Fringe-toed Lizard*

The DEIR’s description of the existing environmental setting as it concerns Mojave Fringe-toed lizard is inadequate on two counts: 1) the DEIR improperly assumes that failure to detect the species during reconnaissance-level surveys is evidence of Mojave Fringe-toed lizard’s absence, and 2) the DEIR is internally inconsistent as to whether Mojave Fringe-toed lizard exist on the site.

O3-18

The DEIR’s reconnaissance-level surveys fail to provide a basis for assuming the lizard’s absence because Mojave Fringe-toed lizards hibernate and are difficult to detect except when they are above ground.<sup>54</sup> Mr. Cashen states that the lizards may simply not have been active during the reconnaissance-level surveys though they are present on the Project site.<sup>55</sup> As for the inconsistency of the DEIR, Figure 3.4-3 shows the presence of Mojave Fringe-toed lizard on the boundary of the Project site, in contrast to Table 3.4.4, which claims that no Mojave Fringe-toed lizard were found on site.<sup>56</sup> Thus, the DEIR fails to establish a complete and accurate existing environmental setting as it relates to Mojave-Fringe-toed lizard.

*iv. The DEIR Fails to Describe the Existing Setting for Golden Eagle*

The DEIR limits its analysis of the existing setting for golden eagle to reviewing surveys done for other projects that underwent environmental review *five or more years ago*.<sup>57</sup> These surveys are outdated, limited, and do not adhere to USFWS survey protocol.<sup>58</sup>

O3-19

<sup>53</sup> *Id.*

<sup>54</sup> *Id.* at p. 3.

<sup>55</sup> *See, id.*

<sup>56</sup> *Id.*

<sup>57</sup> *Id.* at p. 5.

<sup>58</sup> *Id.*

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Aside from the DEIR’s general failure to designate the geographic scope for cumulative impacts analysis, the DEIR also fails to establish an appropriate existing setting for measuring cumulative impacts to golden eagle.<sup>59</sup> The DEIR restricts its existing setting scope based on the nearest known nesting site’s position 10 miles from the Project site.<sup>60</sup> But golden eagle foraging distance in the Mojave Desert is significantly greater than in regions containing more moisture, such as Idaho.<sup>61</sup> In the Mojave Desert, golden eagle have an average maximum foraging range of 32.3 miles.<sup>62</sup> Thus, the Project site is within the foraging range of golden eagle located in the McCoy, Little Maria, and Big Maria Mountains, a fact that the DEIR fails to disclose.<sup>63</sup>

O3-19

v. *The DEIR Fails to Describe the Existing Setting for Desert Tortoise*

The DEIR failed to include protocol-level surveys for desert tortoise on the Project site.<sup>64</sup> Desert tortoise are known to use agricultural fields (the majority of the Project site) for connectivity between natural habitats.<sup>65</sup> Furthermore, the site does contain several hundred acres of desert tortoise natural habitat.<sup>66</sup> Because the DEIR failed to include protocol-level surveys for desert tortoise even though natural habitat and connectivity (agricultural fields) are on the Project site, the DEIR fails to establish a complete and accurate baseline against which impacts to desert tortoise may be measured.

O3-20

vi. *The DEIR Fails to Describe the Existing Setting for Gila Woodpecker*

The DEIR concludes that the Gila woodpecker, which is listed as endangered under the California Endangered Species Act, has a “low” potential for occurrence.<sup>67</sup> The DEIR’s conclusion, however, is flawed in four respects.

O3-21

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<sup>59</sup> *Id.* at p. 20 – 21.  
<sup>60</sup> *Id.* at p. 5.  
<sup>61</sup> *Id.* at 20 – 21.  
<sup>62</sup> *Id.*  
<sup>63</sup> *Id.* at 21.  
<sup>64</sup> *Id.* at 23.  
<sup>65</sup> *Id.*  
<sup>66</sup> *Id.*  
<sup>67</sup> DEIR, Table 3.4-4.

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First, the DEIR’s conclusion is based on the erroneous observation that the nearest Gila woodpecker-occupied habitat is near the city of Blythe on the Colorado River.<sup>68</sup> However, pre-construction surveys for the Blythe Mesa Solar Project revealed woodpeckers in the vicinity of a nest on that project’s site, which is much closer to the Palo Verde Mesa Solar site than Blythe.<sup>69</sup> Second, the Project site is deep within the dispersal area of the Gila woodpecker as evidenced by observations of Gila woodpecker as far as 45 miles west of the Colorado River.<sup>70</sup> Third, the habitat on the Project site appears to be as good or better for Gila woodpeckers than those locations where the Gila woodpecker has been spotted west of the Colorado River.<sup>71</sup>

O3-21

O3-22

Finally, the DEIR evidences no point count bird surveys conducted for the Project site.<sup>72</sup> The DEIR is particularly misleading on the issue of point count surveys because the DEIR claims that “avian point count surveys have not identified Gila woodpecker on site,” but in fact *no avian point count surveys were actually conducted on the Project site.*<sup>73</sup> Avian point count surveys for adjacent solar projects did not cover the Project site.<sup>74</sup>

O3-23

In light of the above flaws, the DEIR failed to accurately and completely describe the existing setting for Gila woodpeckers.

*vii. The DEIR Fails to Describe the Existing Setting for Couch Spadefoot*

The Couch Spadefoot is an extremely rare species in California and is both a BLM Sensitive Species and a California Species of Special Concern.<sup>75</sup> The population is limited to a very small region in the southeastern portion of the state.<sup>76</sup> The Project site is within this range and contains conditions in which Couch’s Spadefoot have been observed.<sup>77</sup>

O3-24

<sup>68</sup> **Exhibit A:** Cashen Comments, p. 7.

<sup>69</sup> *Id.*

<sup>70</sup> *Id.* at p. 8.

<sup>71</sup> *Id.*

<sup>72</sup> *Id.*

<sup>73</sup> *Id.*

<sup>74</sup> *Id.*

<sup>75</sup> *Id.* at p. 3.

<sup>76</sup> *Id.*

<sup>77</sup> *Id.*

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The DEIR relies on reconnaissance-level surveys to conclude that Couch’s Spadefoot are not on the Project site.<sup>78</sup> But Couch’s Spadefoots are dormant for eight to ten months a year and their surface activity is restricted to when there is warm summer rain.<sup>79</sup> Also, the Couch Spadefoot is primarily nocturnal.<sup>80</sup> The DEIR fails to provide any evidence that surveys for Couch’s Spadefoot were conducted during summer rain or nocturnally.<sup>81</sup> Thus, the DEIR fails to establish the existing setting for Couch’s Spadefoot.

O3-24

**V. THE DEIR LACKS SUBSTANTIAL EVIDENCE TO SUPPORT THE DEIR’S SIGNIFICANT IMPACT FINDINGS AND THE DEIR FAILS TO INCORPORATE ALL FEASIBLE MITIGATION MEASURES NECESSARY TO REDUCE SUCH IMPACTS TO A LESS THAN SIGNIFICANT LEVEL**

CEQA has two basic purposes, neither of which the DEIR satisfies. First, CEQA is designed to inform decision makers and the public about the potentially significant environmental impacts of a Project before harm is done to the environment.<sup>82</sup> The DEIR is the “heart” of this requirement.<sup>83</sup> The DEIR has been described as “an environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.”<sup>84</sup>

O3-25

To fulfill this function, the discussion of impacts in a DEIR must be detailed, complete, and “reflect a good faith effort at full disclosure.”<sup>85</sup> An adequate DEIR must contain facts and analysis, not just an agency’s conclusions.<sup>86</sup> CEQA requires a DEIR to disclose all potential direct and indirect significant environmental impacts of a project.<sup>87</sup>

<sup>78</sup> See *id.* at p. 4.

<sup>79</sup> *Id.*

<sup>80</sup> *Id.*

<sup>81</sup> See generally, DEIR; DEIR Appendix D: “Biological Resources.”

<sup>82</sup> CEQA Guidelines § 15002(a)(1); *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal.App.4th 1344, 1354 (“*Berkeley Jets*”); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

<sup>83</sup> *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84.

<sup>84</sup> *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

<sup>85</sup> CEQA Guidelines § 15151; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 721-722.

<sup>86</sup> See *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 568.

<sup>87</sup> PRC § 21100(b)(1); CEQA Guidelines § 15126.2(a).



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Second, if a DEIR identifies potentially significant impacts, it must then propose and evaluate mitigation measures to minimize these impacts.<sup>88</sup> CEQA imposes an affirmative obligation on agencies to avoid or reduce environmental harm by adopting feasible project alternatives or mitigation measures.<sup>89</sup> Without an adequate analysis and description of feasible mitigation measures, it would be impossible for agencies relying upon the DEIR to meet this obligation.

Under CEQA, a DEIR must not only discuss measures to avoid or minimize adverse impacts, but must ensure that mitigation measures are fully enforceable through permit conditions, agreements, or other legally binding instruments.<sup>90</sup> A CEQA lead agency is precluded from making the required CEQA findings unless the record shows that all uncertainties regarding the mitigation of impacts have been resolved; an agency may not rely on mitigation measures of uncertain efficacy or feasibility.<sup>91</sup> This approach helps “insure the integrity of the process of decision by precluding stubborn problems or serious criticism from being swept under the rug.”<sup>92</sup>

In this case, the DEIR fails to satisfy the basic purposes of CEQA. The DEIR conclusions regarding impacts to biological resources, hazards and hazardous wastes, air quality impacts, and public health impacts are not supported by substantial evidence. In preparing the DEIR, the County: 1) failed to provide sufficient information to inform the public and decision-makers about potential environmental impacts; 2) failed to accurately identify and adequately analyze all potentially significant environmental impacts; 3) failed to incorporate adequate measures to mitigate environmental impacts to a less than significant level; and 4) failed to analyze impacts associated with mitigation measures. The County must correct these shortcomings and recirculate a revised DEIR for public review and comment.

O3-25

<sup>88</sup> PRC §§ 21002.1(a), 21100(b)(3); CEQA Guidelines § 15002(a)(2) and (3); *Berkeley Jets*, 91 Cal.App.4th at 1354; *Laurel Heights Improvement Ass’n v. Regents of the University of Cal.* (1998) 47 Cal.3d 376, 400.

<sup>89</sup> PRC §§ 21002-21002.1.

<sup>90</sup> CEQA Guidelines, § 15126.4, subd. (a)(2).

<sup>91</sup> *Kings County Farm Bur. v. County of Hanford* (1990) 221 Cal.App.3d 692, 727-28 (a groundwater purchase agreement was inadequate mitigation because there was no record evidence that replacement water was available).

<sup>92</sup> *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935.

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**A. The DEIR Lacks Substantial Evidence to Support its Finding that Air Quality Impacts Associated with Project Construction Will be Mitigated to Less than Significant**

The DEIR lacks substantial evidence to support its claim that Project construction impacts on air quality will be mitigated to a less than significant level.<sup>93</sup> According to SWAPE experts Matt Hagemann and Jesse Jaeger, the DEIR 1) fails to evaluate the Project’s cumulative impacts, 2) fails to utilize current health risk assessment guidelines, and 3) fails to require mitigation measures necessary to reduce construction emissions to a less than significant level. In addition, the Project fails to implement project-level construction air quality mitigation called for by the Riverside County General Plan 2015. Because the DEIR lacks substantial evidence to support the DEIR’s finding that the Project’s air quality impacts will be mitigated to a less than significant level, a revised and recirculated DEIR is necessary to address and analyze significant air quality impacts.

O3-26

*i. The DEIR Fails to Address the Project’s Cumulative Air Quality Impacts*

The DEIR fails to address the Project’s cumulative impacts by not taking into account the proliferation of solar arrays in east Riverside County.<sup>94</sup> Instead, the DEIR air quality analysis is restricted to the Project’s emissions as compared to the Mojave Air Quality Management District (“MDAQMD”) allowances.<sup>95</sup> However, just because this single Project’s emissions are within MDAQMD allowances does not mean that the Project’s air quality impacts are not cumulatively considerable when combined with impacts from other projects.<sup>96</sup> The DEIR lacks substantial evidence to conclude that the Project’s air quality impacts are not “cumulatively considerable.”<sup>97</sup>

O3-27

<sup>93</sup> **Exhibit B:** SWAPE Comments, p. 1.

<sup>94</sup> **Exhibit B:** SWAPE Comments, p. 2 – 5.

<sup>95</sup> *Id.* at p. 2.

<sup>96</sup> *See, id.* at p. 2 – 4.

<sup>97</sup> *Id.* at p. 1 – 4.; *CEQA Guidelines: Appendix G* (containing significance criteria adopted by the DEIR) (“Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?”)

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SWAPE points out that though the DEIR integrated as many as twenty-seven projects to assess cumulative *traffic* impacts, the DEIR, without substantial evidence justifying its decision, omitted any discussion of these projects in connection with cumulative *air quality* impacts.<sup>98</sup> Many of the projects are within a three-mile radius of the Palo Verde Mesa Solar Project.<sup>99</sup> Because the DEIR’s air quality analysis neglects to include a complete cumulative impact analysis, the DEIR lacks substantial evidence for its finding that the Project will result in less than significant air quality impacts.<sup>100</sup>

O3-28

*ii. The DEIR Fails to Utilize Current Health Risk Assessment Guidelines*

The DEIR concludes that the Project’s construction impacts on cancer risk from toxic air emissions would be less than significant.<sup>101</sup> However, the DEIR’s conclusion was based on outdated health risk assessment guidelines.<sup>102</sup>

O3-29

First, in February 2015, the California Environmental Protection Agency’s Office of Environmental Health Hazard Assessment (“OEHHA”) released updated health risk assessment guidelines that require risk calculations for specific age groupings.<sup>103</sup> Though these guidelines were adopted by OEHHA in March 2015, the DEIR fails to incorporate these guidelines in its health risk assessment.<sup>104</sup>

Second, age-specific rates and age sensitivity factors were formally adopted and implemented before the March 2015 OEHHA guidelines, and yet the DEIR failed to incorporate even these long-standing rates and sensitivity factors.<sup>105</sup> For over fifteen years, OEHHA has developed Age Sensitivity Factors (“ASFs”) in response to statutory requirements.<sup>106</sup> By 2009, OEHHA had concluded that cancer risk varies considerably among infants, children, and adults because of behavioral and physiological differences.<sup>107</sup> Based on *current* ASFs, the carcinogen-induced

O3-30

<sup>98</sup> **Exhibit B:** SWAPE Comments, p. 3 - 4.

<sup>99</sup> *Id.* at p. 4.

<sup>100</sup> *Id.* at p. 5.

<sup>101</sup> *Id.* at p. 6.

<sup>102</sup> *Id.*

<sup>103</sup> *Id.* at p. 6.

<sup>104</sup> *Id.*

<sup>105</sup> *Id.*

<sup>106</sup> *See, id.*

<sup>107</sup> *Id.*

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cancer risk to infants and children is exponentially higher than adults.<sup>108</sup> For example, an ASF of 10 should be applied to infants less than two years of age, while a factor of 1 should be applied to adults sixteen to seventy years of age.<sup>109</sup> SWAPE strongly recommends that the current ASFs be applied to the Project in a revised and recirculated EIR.<sup>110</sup>

O3-30

Third, in August 2012, OEHHA adopted updating breathing rates for children and infants which recommend that the 95th percentile of breathing rates be used for health risk impacts.<sup>111</sup> In contradiction of the current breathing rate recommendation, the DEIR utilizes an 80th percentile.<sup>112</sup> The result is that the DEIR underestimates health risk impacts to infants and children.<sup>113</sup> SWAPE urges the County to prepare a revised and recirculated DEIR that includes currently accepted breathing rate percentiles for measuring cancer risks to infants and children.<sup>114</sup>

O3-31

Fourth, in February 2015, OEHHA released guidelines that require risk calculations for specific age groups, including deferential effects on infants, children, and other sensitive populations.<sup>115</sup> The DEIR fails to comply with these guidelines.<sup>116</sup> SWAPE conducted a health risk assessment evaluating the effect of diesel particulate matter (“DPM”) emissions on sensitive receptors.<sup>117</sup> SWAPE’s analysis used the same three-year period as the DEIR, but, unlike the DEIR, used currently recommended ASFs and breathing rates.<sup>118</sup> The result of the analysis indicates a cancer risk of 14.1 in one million, which exceeds the 10 in one million significance threshold adopted by MDAQMD and the DEIR.<sup>119</sup> SWAPE’s result is a stark contrast to the DEIR result of 0.554 in one million, which was based on outdated methods and factors.<sup>120</sup>

<sup>108</sup> *See, id.* at p. 6 – 7.

<sup>109</sup> *Id.*, Table 8-3 at p. 7.

<sup>110</sup> *Id.* at p. 9.

<sup>111</sup> *Id.* at p. 7 – 8.

<sup>112</sup> *Id.* at p. 8.

<sup>113</sup> *Id.*

<sup>114</sup> *Id.* at p. 9.

<sup>115</sup> *Id.* at p. 8.

<sup>116</sup> *Id.*

<sup>117</sup> *Id.*

<sup>118</sup> *Id.*

<sup>119</sup> *Id.* at 9; *See*, DEIR: Appendix G “Air Quality,” p. 20.

<sup>120</sup> **Exhibit B:** SWAPE Comments, p. 9.

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By failing to include current health risk assessment factors for ASFs and breathing rates, and failing to utilize calculations for specific age groups, the DEIR lacks substantial evidence supporting the finding that the Project’s DPM-emission impacts on sensitive receptors would be less than significant.<sup>121</sup> SWAPE strongly discourages approval of the DEIR, and recommends a revised and recirculated DEIR be prepared that contains up-to-date health risk assessments accounting for ASFs and age-specific breathing rates.<sup>122</sup>

O3-31

*iii. The Project Fails to Comply with Mitigation Measures contained in the Riverside County General Plan 2015 DEIR that are Necessary to Reduce Significant Cumulatively Considerable Air Quality Impacts to Less than Significant*

The Riverside County General Plan 2015 DEIR contains longstanding mitigation measures to reduce fugitive dust and pollution due to construction.<sup>123</sup> These measures are necessary to reduce significant cumulatively considerable air quality impacts.<sup>124</sup> The DEIR lacks any indication that some of these mandatory mitigation measures will be imposed on the Project.

O3-32

Mitigation Measure 4.5.1B requires installation of “wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment leaving the site each trip.”<sup>125</sup> The Project’s DEIR lacks any indication that the Applicant or the Applicant’s contractors will be required to implement such a measure, which is particularly concerning given the Project’s extensive network of unpaved access roads.<sup>126</sup>

Mitigation Measure 4.5.1C contains two requirements that the DEIR fails to indicate will be imposed on the Project. First, this mitigation measure demands that “the construction contractor shall ensure that construction grading plans include a statement that all construction equipment will be tuned and maintained in

O3-33

<sup>121</sup> *Id.*

<sup>122</sup> *Id.*

<sup>123</sup> **Exhibit C:** Riverside County General Plan 2015 DEIR “Air Quality,” (“General Plan 2015”) p. 4.6-54.

<sup>124</sup> *See, id.* at p. 4.6-53.

<sup>125</sup> *Id.*

<sup>126</sup> *See, DEIR, p. 2.-24; DEIR, Figure 2-15.*

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accordance with the manufacturer’s specifications.”<sup>127</sup> The DEIR is silent on contractors’ obligations to include such a statement in grading plans.

O3-33

Second, Mitigation Measure 4.5.1C requires that “the construction contractor shall time the construction activities so as to not interfere with peak hour traffic and minimize obstruction of through traffic lanes adjacent to the site; if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.”<sup>128</sup> The DEIR provides no such requirement regarding the timing of construction activities so as to not to interfere with peak hour traffic, let alone provisions for providing a flagman. Though the Project’s Mitigation Measure TRA-1 proposes a Traffic Management Plan to “split the workforce and stagger arrival times during peak construction periods,” the DEIR is silent on staggering *construction activities*.<sup>129</sup>

O3-34

The County specifically adopted the above mitigation measures for purposes of reducing construction-related cumulatively considerable air quality impacts to less than significant levels.<sup>130</sup> By failing to implement such measures, the Project’s DEIR lacks substantial evidence that the Project’s cumulatively considerable air quality impacts will be less than significant.

*iv. Additional Mitigation Measures are Necessary to Reduce Construction Emissions to a Less than Significant Level*

The DEIR proposes *no* air quality mitigation measures specific to the Project.<sup>131</sup> As demonstrated by SWAPE’s analysis above, DPM emissions will in fact cause significant health risk impacts on sensitive receptors and the DEIR lacks substantial evidence that such impacts will not occur. Therefore, the Project’s public health impacts require a revised and recirculated DEIR that includes mitigation measures for public health impacts from accurately projected DPM emissions.<sup>132</sup>

O3-35

<sup>127</sup> **Exhibit C:** General Plan 2015, p. 4.6-55.

<sup>128</sup> *Id.*

<sup>129</sup> DEIR, p. 3.15-33.

<sup>130</sup> **Exhibit C:** General Plan 2015, p. 4.6-53.

<sup>131</sup> DEIR, p. 3.3-32.

<sup>132</sup> **Exhibit B:** SWAPE Comments, at 9.

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Additional mitigation measures can be found in the California Air Pollution Control Officers Association’s (“CAPCOA’s”) *Quantifying Greenhouse Gas Mitigation Measures*, which attempt to reduce Greenhouse Gas (GHG) levels, as well as reduce Criteria Air Pollutants such as particulate matter.<sup>133</sup> DPM is a byproduct of diesel fuel combustion, and is emitted by on-road vehicles and by off-road construction equipment.<sup>134</sup> Mitigation for criteria pollutant emissions should include consideration of the following measures in an effort to reduce particulate matter construction emissions to below MDAQMD thresholds. SWAPE’s description of these mitigation measures and the proven efficacy of such measures is included below in its entirety:

a. Limit Construction Equipment Idling Beyond Regulation Requirements

Heavy duty vehicles will idle during loading/unloading and during layovers or rest periods with the engine still on, which requires fuel use and results in emissions. The California Air Resources Board (CARB) Heavy-Duty Vehicle Idling Emissions Reduction Program limits idling of diesel-fueled commercial motor vehicles to five minutes. Reduction in idling time beyond the five minutes required under the regulation would further reduce fuel consumption and thus emissions. The Project applicant must develop an enforceable mechanism that monitors the idling time to ensure compliance with this mitigation measure.

b. Require Implementation of Diesel Control Measures

The Northeast Diesel Collaborative (NEDC) is a regionally coordinated initiative to reduce diesel emissions, improve public health, and promote clean diesel technology. The NEDC recommends that contracts for all construction projects require the following diesel control measures:<sup>135</sup>

- All diesel onroad vehicles on site for more than 10 total days must have either (1) engines that meet EPA 2007 onroad emissions standards or (2) emission control technology verified by EPA<sup>136</sup> or the

<sup>133</sup> *Id.*

<sup>134</sup> *Id.*

<sup>135</sup> Diesel Emission Controls in Construction Projects, *available at:*

<http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf>

<sup>136</sup> For EPA’s list of verified technology: <http://www3.epa.gov/otaq/diesel/verification/verif-list.htm>

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California Air Resources Board (CARB)<sup>137</sup> to reduce PM emissions by a minimum of 85 percent.

- All diesel generators on site for more than 10 total days must be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85 percent.
- All diesel nonroad construction equipment on site for more than 10 total days must have either (1) engines meeting EPA Tier 4 nonroad emission standards or (2) emission control technology verified by EPA or CARB for use with nonroad engines to reduce PM emissions by a minimum of 85 percent for engines 50 horse power (hp) and greater and by a minimum of 20 percent for engines less than 50 hp.
- All diesel vehicles, construction equipment, and generators on site shall be fueled with ultra-low sulfur diesel fuel (ULSD) or a biodiesel blend<sup>138</sup> approved by the original engine manufacturer with sulfur content of 15 parts per million (ppm) or less.

c. Repower or Replace Older Construction Equipment Engines

The NEDC recognizes that availability of equipment that meets the EPA’s newer standards is limited.<sup>139</sup> Due to this limitation, the NEDC proposes actions that can be taken to reduce emissions from existing equipment in the *Best Practices for Clean Diesel Construction* report.<sup>140</sup> These actions include but are not limited to:

- Repowering equipment (i.e. replacing older engines with newer, cleaner engines and leaving the body of the equipment intact).

Engine repower may be a cost-effective emissions reduction strategy when a vehicle or machine has a long useful life and the cost of the engine does not approach the cost of the entire vehicle or machine. Examples of good potential replacement candidates include marine vessels, locomotives, and

O3-35

<sup>137</sup> For CARB’s list of verified technology: <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>

<sup>138</sup> Biodiesel blends are only to be used in conjunction with the technologies which have been verified for use with biodiesel blends and are subject to the following requirements:

<http://www.arb.ca.gov/diesel/verdev/reg/biodieselcompliance.pdf>

<sup>139</sup> <http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf>

<sup>140</sup> <http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf>



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large construction machines.<sup>141</sup> Older diesel vehicles or machines can be repowered with newer diesel engines or in some cases with engines that operate on alternative fuels (see section “Use Alternative Fuels for Construction Equipment” for details). The original engine is taken out of service and a new engine with reduced emission characteristics is installed. Significant emission reductions can be achieved, depending on the newer engine and the vehicle or machine’s ability to accept a more modern engine and emission control system. It should be noted, however, that newer engines or higher tier engines are not necessarily cleaner engines, so it is important that the Project Applicant check the actual emission standard level of the current (existing) and new engines to ensure the repower product is reducing emissions for DPM.<sup>142</sup>

- Replacement of older equipment with equipment meeting the latest emission standards.

Engine replacement can include substituting a cleaner highway engine for a nonroad engine. Diesel equipment may also be replaced with other technologies or fuels. Examples include hybrid switcher locomotives, electric cranes, LNG, CNG, LPG or propane yard tractors, forklifts or loaders. Replacements using natural gas may require changes to fueling infrastructure.<sup>143</sup> Replacements often require some re-engineering work due to differences in size and configuration. Typically, there are benefits in fuel efficiency, reliability, warranty, and maintenance costs.<sup>144</sup>

d. Install Retrofit Devices on Existing Construction Equipment

PM emissions from alternatively-fueled construction equipment can be further reduced by installing retrofit devices on existing and/or new equipment. The most common retrofit technologies are retrofit devices for engine exhaust after-treatment. These devices are installed in the exhaust

<sup>141</sup> Repair, Rebuild, and Repower, EPA, available at: <https://www.epa.gov/verified-diesel-tech/learn-about-verified-technologies-clean-diesel#repair>

<sup>142</sup> Diesel Emissions Reduction Program (DERA): Technologies, Fleets and Projects Information, available at: <http://www2.epa.gov/sites/production/files/2015-09/documents/420p11001.pdf>

<sup>143</sup> Alternative Fuel Conversion, EPA, available at: <https://www3.epa.gov/otaq/consumer/fuels/altfuels/altfuels.htm#fact>

<sup>144</sup> Cleaner Fuels, EPA, available at: <https://www.epa.gov/verified-diesel-tech/learn-about-verified-technologies-clean-diesel#cleaner>



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system to reduce emissions and should not impact engine or vehicle operation. <sup>145</sup> Below is a table, prepared by the EPA, that summarizes the commonly used retrofit technologies and the typical cost and emission reductions associated with each technology.<sup>146</sup> It should be noted that actual emissions reductions and costs will depend on specific manufacturers, technologies and applications.

Technology	Typical Emissions Reductions (percent)				Typical Costs (\$)
	PM	NO <sub>x</sub>	HC	CO	
Diesel Oxidation Catalyst (DOC)	20-40	-	40-70	40-60	Material: \$600-\$4,000 Installation: 1-3 hours
Diesel Particulate Filter (DPF)	85-95	-	85-95	50-90	Material: \$8,000-\$50,000 Installation: 6-8 hours
Partial Diesel Particulate Filter (pDPF)	up to 60	-	40-75	10-60	Material: \$4,000-\$6,000 Installation: 6-8 hours
Selective Catalyst Reduction (SCR)	-	up to 75	-	-	\$10,000-\$20,000; Urea \$0.80/gal
Closed Crankcase Ventilation (CCV)	varies	-	-	-	-
Exhaust Gas Recirculation (EGR)	-	25-40	-	-	-
Lean NO <sub>x</sub> Catalyst (LNC)	-	5-40	-	-	\$6,500-\$10,000

O3-35

e. Use Electric and Hybrid Construction Equipment

CAPCOA’s Quantifying Greenhouse Gas Mitigation Measures report also proposes the use of electric and/or hybrid construction equipment as a way to mitigate DPM emissions. When construction equipment is powered by

<sup>145</sup> Retrofit Technologies, EPA, available at: <https://www.epa.gov/verified-diesel-tech/learn-about-verified-technologies-clean-diesel#retrofit>

<sup>146</sup> Cleaner Diesels: Low Cost Ways to Reduce Emissions from Construction Equipment, March 2007, available at: <https://www.epa.gov/sites/production/files/2015-09/documents/cleaner-diesels-low-cost-ways-to-reduce-emissions-from-construction-equipment.pdf>, p. 26

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grid electricity rather than fossil fuel, direct emissions from fuel combustion are replaced with indirect emissions associated with the electricity used to power the equipment. Furthermore, when construction equipment is powered by hybrid-electric drives, emissions from fuel combustion are also greatly reduced. Electric construction equipment is available commercially from companies such as Peterson Pacific Corporation,<sup>147</sup> which specialize in the mechanical processing equipment like grinders and shredders. Construction equipment powered by hybrid-electric drives is also commercially available from companies such as Caterpillar<sup>148</sup>. For example, Caterpillar reports that during an 8-hour shift, its D7E hybrid dozer burns 19.5 percent fewer gallons of fuel than a conventional dozer while achieving a 10.3 percent increase in productivity. The D7E model burns 6.2 gallons per hour compared to a conventional dozer which burns 7.7 gallons per hour.<sup>149</sup> Fuel usage and savings are dependent on the make and model of the construction equipment used. The Project Applicant should calculate project-specific savings and provide manufacturer specifications indicating fuel burned per hour.

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f. *Implement a Construction Vehicle Inventory Tracking System*<sup>150</sup>

CAPCOA’s Quantifying Greenhouse Gas Mitigation Measures report recommends that the Project Applicant provide a detailed plan that discusses a construction vehicle inventory tracking system to ensure compliances with construction mitigation measures. The system should include strategies such as requiring engine run time meters on equipment, documenting the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment and daily logging of the operating hours of the equipment. Specifically, for each onroad construction vehicle, nonroad construction equipment, or generator, the contractor should submit to the developer’s representative a report prior to bringing said equipment on site that includes:<sup>151</sup>

<sup>147</sup> Peterson Electric Grinders Brochure, available at: [http://www.petersoncorp.com/wp-content/uploads/peterson\\_electric\\_grinders1.pdf](http://www.petersoncorp.com/wp-content/uploads/peterson_electric_grinders1.pdf)

<sup>148</sup> Electric Power Products, available at: [http://www.cat.com/en\\_US/products/new/power-systems/electric-power-generation.html](http://www.cat.com/en_US/products/new/power-systems/electric-power-generation.html)

<sup>149</sup> <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

<sup>150</sup> <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

<sup>151</sup> Diesel Emission Controls in Construction Projects, available at: <http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf>

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- Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number.
- The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level.
- The Certification Statement<sup>152</sup> signed and printed on the contractor's letterhead.

Furthermore, the contractor should submit to the developer's representative a monthly report that, for each onroad construction vehicle, nonroad construction equipment, or generator onsite, includes: <sup>153</sup>

- Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
- Any problems with the equipment or emission controls.
- Certified copies of fuel deliveries for the time period that identify:
  - Source of supply
  - Quantity of fuel
  - Quality of fuel, including sulfur content (percent by weight).

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In addition to these measures, we also recommend that the Applicant implement the following mitigation measures, called "Enhanced Exhaust Control Practices,"<sup>154</sup> that are recommended by the Sacramento Metropolitan Air Quality Management District (SMAQMD):

1. The project representative shall submit to the lead agency a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project.
  - The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment.

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<sup>152</sup> Diesel Emission Controls in Construction Projects, *available at*: <http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf>

The NEDC Model Certification Statement can be found in Appendix A.

<sup>153</sup> Diesel Emission Controls in Construction Projects, *available at*: <http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf>

<sup>154</sup>[http://www.airquality.org/ceqa/Ch3EnhancedExhaustControl\\_10-2013.pdf](http://www.airquality.org/ceqa/Ch3EnhancedExhaustControl_10-2013.pdf)

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- The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.
  - This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment.
  - The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.
2. The project representative shall provide a plan for approval by the lead agency demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOX reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average.
- This plan shall be submitted in conjunction with the equipment inventory.
  - Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
  - The District's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.
3. The project representative shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour.
- Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency monthly.
  - A visual survey of all in-operation equipment shall be made at least weekly.
  - A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that

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the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.

4. The District and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other District, state or federal rules or regulations.

These measures are more stringent and prescriptive than those measures identified in the DEIR. When combined together, the measures that we recommend in these comments offer a cost-effective, feasible way to incorporate lower-emitting equipment into the Project’s construction fleet, which subsequently reduces PM and DPM emissions released during Project construction. An updated DEIR must be prepared to include additional mitigation measures, as well as include an updated air quality assessment to ensure that the necessary mitigation measures are implemented to reduce construction emissions to below thresholds. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval to ensure that the Project’s construction-related emissions are reduced to the maximum extent possible.

The measures include:

- Limit Construction Equipment Idling Beyond Regulation Requirements
- Require Implementation of Diesel Control Measures
- Repower or Replace Older Construction Equipment Engines
- Install Retrofit Devices on Existing Construction Equipment
- Use Electric and Hybrid Construction Equipment
- Implement a Construction Vehicle Inventory Tracking System<sup>155</sup>

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<sup>155</sup> See, *id.* at p. 9 – 15.

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The above measures above are both cost-effective and feasible methods of incorporating lower emitting vehicles into the Project’s construction fleet.<sup>156</sup> SWAPE recommends that the County produce a revised and recirculated DEIR with an updated air quality analysis, sufficient mitigation measures, and a demonstration that the Applicant is committed to the implementation of these measures.<sup>157</sup> Only through implementing CAPCOA-approved mitigation measures may the actual public health impacts of the Project be reduced to less than significant.<sup>158</sup> Currently, there are no mitigation measures proposed for air quality impacts, and therefore the DEIR lacks substantial evidence that public health impacts will be reduced to less than significant.

O3-35

**B. The DEIR Lacks Substantial Evidence to Support the Claim that Hazards and Hazardous Waste Impacts Associated with Project Construction Will be Mitigated to Less than Significant**

The DEIR claims that hazards and hazardous waste impacts will be less than significant, however the DEIR lacks substantial evidence to support such a finding because 1) the DEIR fails to evaluate the Project site based on the DEIR’s own significance criteria, 2) the Project site is contaminated due to the prior siting of eighty 500-gallon underground storage tanks (“USTs”) on the Project site, and 3) the Project improperly defers analysis and identification of mitigation for pesticide contamination to *after* the EIR is to be certified, which prevents disclosure of harmful contamination conditions. Because the DEIR lacks substantial evidence to support the DEIR’s finding that the Project will not pose a significant impact from hazards and hazardous waste, a revised and recirculated DEIR is required to address and analyze significant air quality impacts.

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*i. The DEIR Fails to Evaluate the Project Site Based on the DEIR’s Significance Criteria*

Though the DEIR admits that the Project site “once contained USTs associated with the former wind turbines,”<sup>159</sup> the DEIR fails to state that the Project site includes Blythe Lemon Ranch, a location that has been listed pursuant to Government Code section 65962.5 (the “Cortese List”).<sup>160</sup> SWAPE indicates that

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<sup>156</sup> *Id.* at 15.

<sup>157</sup> *Id.* at 9.

<sup>158</sup> *Id.* at 9.

<sup>159</sup> DEIR, at p. 3.8-24.

<sup>160</sup> **Exhibit B:** SWAPE Comments, p. 15.

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the Blythe Lemon Ranch site contains residual fuel constituents, which are derived from eighty (80) underground storage tanks that were used to power wind turbines on the Project site.<sup>161</sup>

The DEIR’s failure to mention that Blythe Lemon Ranch is a Cortese-listed site is a major flaw in the DEIR. The recommended CEQA significance criteria for hazards and hazardous waste includes determining whether the Project is “located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 [the Cortese List] and, as a result, would it create a significant hazard to the public or the environment.”<sup>162</sup> The DEIR claims to adopt this significance criterion,<sup>163</sup> but then fails to identify that the Project contains a site on the Cortese List.<sup>164</sup> The DEIR’s omission is even more egregious and inexcusable when considering the unusually high number of USTs that were present on the Project site (80).<sup>165</sup>

O3-37

*ii. Substantial Evidence Indicates that Construction Workers will be Exposed to Residual Fuel Contamination*

The Project’s Phase II Environmental Site Assessment (“ESA”) reveals residual fuel contamination at depths as shallow as two feet.<sup>166</sup> The Phase I ESA reveals that petroleum hydrocarbon (“TPHg”) contamination exceeds San Francisco Bay Regional Water Quality Control Board (“BRWQCB”) Environmental Screening Levels (“ESLs”) for direct exposure to construction workers.<sup>167</sup> The Phase I ESA indicates TPHg at 5200 mg/kg in soil at depths of six feet, far exceeding the BRWQCB ESL of 2800 mg/kg.<sup>168</sup>

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Construction workers are likely to be exposed to soils at depths of six feet and more because the Project calls for pile driving to depths of eight to twelve feet for panel supports and excavations of three feet for underground electrical currents and

<sup>161</sup> *Id.*

<sup>162</sup> CEQA Guidelines: Appendix G (“Hazards and Hazardous Materials”) VII(d).

<sup>163</sup> *See*, DEIR, 3.8-23.

<sup>164</sup> **Exhibit B**: SWAPE Comments, p. 15.

<sup>165</sup> *Id.*

<sup>166</sup> *Id.* at p. 16.

<sup>167</sup> *Id.* Mr. Hagemann states that though the screening levels were adopted by a jurisdiction outside Riverside County, these are useful guidelines for determining health risks. *Id.*

<sup>168</sup> *Id.*



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for the O&M building foundation.<sup>169</sup> Health risks associated with such exposure include central nervous system impairments such as headaches and dizziness, and peripheral neuropathy, which consisting of numbness in the feet and legs and effects on the blood, immune system, lungs, skin, and eyes.<sup>170</sup> The International Agency for Research on Cancer has determined that one TPHg compound (benzene) is carcinogenic to humans and that gasoline is possibly carcinogenic to humans.<sup>171</sup>

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The likelihood of construction workers being exposed to harmful levels of TPHg indicates that the DEIR lacks substantial evidence to support the finding that hazards and hazardous waste impacts will be less than significant.<sup>172</sup>

*iii. The Project Improperly Defers Pesticide Contamination Analysis and Mitigation*

The DEIR recognizes that the Project will require mitigation of significant hazards impacts due to past pesticide use on the Project site.<sup>173</sup> Despite the known presence of pesticide contamination, the DEIR defers on-site sampling for pesticides until after the DEIR is certified.<sup>174</sup> The effect of the deferment is that the DEIR fails to adequately disclose potential hazards to construction workers from pesticide contamination.<sup>175</sup>

O3-39

SWAPE recommends that a revised DEIR be prepared that includes a Phase II ESA that compares soil samples containing residual pesticides to regulatory ESLs that were designed to protect public health.<sup>176</sup> The sampling should adhere to the Department of Toxic Substances Control guidelines entitled “Interim Guidance for Sampling Agricultural Properties.”<sup>177</sup> Then, the results of the sampling should be evaluated by appropriate regulatory agencies, including the Riverside County Department of Health.<sup>178</sup> The revised DEIR should include appropriate mitigation, based on the Phase II ESA, to reduce significant impacts to less than significant.<sup>179</sup>

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<sup>169</sup> *Id.*  
<sup>170</sup> *Id.*  
<sup>171</sup> *Id.*  
<sup>172</sup> *Id.* at p. 16 - 17.  
<sup>173</sup> DEIR, p. 3.8 - 26.  
<sup>174</sup> *Id.* at p. 3.8 – 41.  
<sup>175</sup> **Exhibit B:** SWAPE Comments, p. 17.  
<sup>176</sup> *Id.*  
<sup>177</sup> *Id.*  
<sup>178</sup> *Id.*  
<sup>179</sup> *Id.*

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**C. The DEIR Lacks Substantial Evidence to Support its Finding that the Project’s Cumulatively Considerable Impacts on Biological Resources Will Be Less Than Significant**

The Project presents unique adverse implications for biological resources in the Cadiz Valley and Chocolate Mountains eco-region subarea. More specifically, the Project marks one of the latest projects in the Chuckwalla Valley region, an area containing special-species habitat that is under ever growing pressure from the proliferation of renewable energy projects.<sup>180</sup> The Project specifically marks the final “brick” in a wall of solar projects that will seal off wildlife corridors, all three of which facilitate habitat connectivity: 1) the Palo Verde Mesa in both east-west and north-south directions, 2) between the McCoy Mountains and the Colorado River, and 3) between the central and southern McCoy Mountains and the Big Maria Mountains.<sup>181</sup> A 19-mile barrier from north to south and a 22-mile barrier east to west will block wildlife movement in the area.<sup>182</sup> Thus, though each project in the Chuckwalla Valley and the three wildlife corridors create ever more significant cumulative impacts, the Project’s role as completely blocking three wildlife corridors deserves particular scrutiny, analysis, and mitigation.

O3-40

Many of the special-status species that will be significantly impacted by the Project exhibit a metapopulation structure.<sup>183</sup> As Mr. Cashen explains, metapopulation species exhibit discrete spatial populations and at least one or more of the local populations exhibit a non-trivial possibility of extinction.<sup>184</sup> Mojave Fringe-toed lizard, desert tortoises, Couch Spadefoot, desert bighorn sheep, and plants are among many special-status species in the Chuckwalla Valley and threatened wildlife corridors that face significant cumulatively considerable impacts.<sup>185</sup> Blocking metapopulations results in extinction for species.<sup>186</sup>

<sup>180</sup> See, **Exhibit A:** Cashen Comments, p. 43.

<sup>181</sup> See, *id.* at p. 15; DEIR, Figure 3-1.

<sup>182</sup> **Exhibit A:** Cashen Comments, p. 15.

<sup>183</sup> *Id.* at p. 15 – 16.

<sup>184</sup> *Id.* at p. 15.

<sup>185</sup> *Id.*

<sup>186</sup> *Id.* at 16.

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Aside from the elimination of the three wildlife corridors, no less than 15 new solar projects are planned for east Riverside County.<sup>187</sup> Among those projects for which CEQA and NEPA reviews have been completed, there has been a severe lack of cumulative impacts analysis and mitigation.

For instance, the Blythe Solar Power project, the Blythe Mesa Solar project, and the McCoy Solar Energy project eliminated 14,008 acres of western burrowing owl habitat.<sup>188</sup> The total compensatory habitat that emerged out of the environmental review process for these three projects equals the grand sum of 204.5 acres.<sup>189</sup> Thus, the recent history of solar projects in east Riverside County indicates a drastic disparity between eliminated special-status species habitat and preserved habitat. With every new project in the Chuckwalla Valley and in the three wildlife corridors, pressures on wildlife and habitat increase and project impacts become more cumulatively considerable.<sup>190</sup>

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As detailed below and in subsequent sections, the DEIR lacks substantial evidence supporting its conclusions that cumulatively considerable impacts to special-status species will be less than significant.

*i. The DEIR Fails to Establish a Sufficiently Detailed Baseline for Cumulatively Considerable Impacts*

As described above, the DEIR fails to adequately describe the geographic scope for cumulative impacts to biological resources. Without quantifying habitat, habitat loss, and geographic scope, the DEIR lacks substantial evidence supporting its finding that cumulatively considerable impacts to biological resources will be less than significant.

O3-42

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<sup>187</sup> See, DEIR Table 3-2. Note that solar projects are not the only proliferating development projects in the subarea. Wind energy projects, residential developments, and electrical facilities are also being planned and approved at a high rate in the subarea. *Id.*

<sup>188</sup> **Exhibit A:** Cashen Comments, p. 18.

<sup>189</sup> *Id.*

<sup>190</sup> *Id.* at p. 15 – 23.

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*ii. The DEIR Mischaracterizes the Habitat Present on the Project Site*

The DEIR mischaracterizes the Project site as lacking “open space.”<sup>191</sup> The DEIR relies on this mischaracterization to assume that impacts on wildlife habitat and vegetative communities will not be cumulatively considerable. Mr. Cashen explains, contrary to the DEIR’s mischaracterization, that agricultural land must in fact be considered “open space” because agricultural lands provide movement corridors and wildlife habitat.<sup>192</sup> The DEIR’s mischaracterization of the habitat on site ignores that special status species adapt to, and even prefer in some circumstances, agricultural land as habitat.<sup>193</sup>

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*iii. The DEIR Ignores Cumulatively Considerable Impacts that are Independent of Habitat Presence*

The DEIR concludes that “incremental impact to wildlife habitat and vegetation communities would not be cumulatively considerable because unlike most of the solar projects on the cumulative project list, the [Project] is not proposed primarily on open space.”<sup>194</sup> Even if “open space” were a correct description of the Project site, which it is not, such a finding ignores Project characteristics such as raven predation, fugitive dust, and invasive weeds.<sup>195</sup> All three of these Project characteristics impact wildlife habitat and vegetation communities.<sup>196</sup> Thus, the DEIR lacks substantial evidence supporting its finding that the Project’s cumulatively considerable residual impacts on habitat will be less than significant.<sup>197</sup>

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<sup>191</sup> DEIR, p. 3.4-51.

<sup>192</sup> **Exhibit A:** Cashen Comments, p. 16 – 17.

<sup>193</sup> *Id.* at p. 17.

<sup>194</sup> DEIR, p. 3.4-51.

<sup>195</sup> **Exhibit A:** Cashen Comments, p. 17.

<sup>196</sup> *Id.*

<sup>197</sup> *Id.*

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**D. The DEIR Lacks Substantial Evidence to Support its Finding that Biological Resources Impacts Associated with the Project Will be Mitigated to Less than Significant**

- i. The DEIR Lacks Substantial Evidence to Support Its Finding that Decommissioning will Cause Less than Significant Impacts on Biological Resources*

As describe above, the DEIR fails to adequately describe the Project’s decommissioning phase even though CEQA demands that the decommissioning phase be described and analyzed. By failing to describe the decommissioning phase, the DEIR lacks substantial evidence that decommissioning will result in less than significant impacts to biological resources.

Furthermore, in contrast to the DEIR’s claims, Mitigation Measure BIO-1 is insufficient for reducing decommissioning impacts on biological resources to a less than significant level. Mitigation Measure BIO-1 is actually directed at “ground disturbing construction activities,” not the decommissioning phase.<sup>198</sup> Though the DEIR mentions other mitigation measures that would be triggered by Mitigation Measure BIO-1,<sup>199</sup> there is no reason to believe that such mitigation measures will be applied to decommissioning because Mitigation Measure BIO-1 does not apply to decommissioning.<sup>200</sup>

Even if Mitigation Measure BIO-1 were directed at decommissioning impacts, Mr. Cashen presents substantial evidence that the mitigation measure is insufficient for reducing impacts to less than significant.<sup>201</sup> Specifically, Mitigation Measure BIO-1 calls for a “biweekly” monitoring schedule,<sup>202</sup> but neither a two-week or twice-a-week monitoring schedule is sufficient to reduce construction *and* decommissioning significant impacts to less than significant levels.<sup>203</sup>

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<sup>198</sup> DEIR, p. 3.4-46.

<sup>199</sup> *Id.* at p. 3.4-57.

<sup>200</sup> *Id.* at p. 3.4-57

<sup>201</sup> **Exhibit A:** Cashen Comments, p. 26.

<sup>202</sup> DEIR, p. 3.4-57

<sup>203</sup> **Exhibit A:** Cashen Comments, p. 26.

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ii. *The DEIR Lacks Substantial Evidence to Support its Finding that the Project’s Potential to Cause Wildlife Populations to Fall Below a Self-Sustaining Level will Be Less Than Significant*

As a threshold matter, the DEIR lacks any analysis on factors associated with population viability, including abundance and distribution.<sup>204</sup> Instead, the DEIR supports its conclusion that the Project’s potential to cause wildlife populations to fall below a self-sustaining level will be less than significant by merely pointing to the fact that the Project site primarily contains agricultural land.<sup>205</sup> As described above, not only is the DEIR’s characterization of the Project site’s habitat inaccurate, but the DEIR’s characterization does not excuse the DEIR’s lack of analysis regarding whether wildlife populations in the existing setting will fall below self-sustaining levels.

O3-46

iii. *The DEIR Lacks Substantial Evidence to Support its Finding that Impacts to Western Burrowing Owl will be Less than Significant*

a. The DEIR Fails to Describe Existing Environmental Conditions for the Burrowing Owl

As described above, the DEIR fails to accurately and completely describe existing environmental conditions concerning burrowing owl. The 2011 and 2013 surveys relied upon by the DEIR are out of date, too geographically limited, and fail to include CDFW-recommended survey information, including surveyor names, start and end times, qualifications, and weather conditions. Without a complete and accurate baseline from which to compare the Project’s impacts on burrowing owls, the DEIR lacks substantial evidence to support its finding that impacts on the burrowing owl will be reduced to less than significant.

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b. The DEIR Fails to Describe Proposed Evictions of Burrowing Owls

The DEIR fails to evaluate the impacts of burrowing owl eviction. The DEIR permits the applicant to evict owls, but does not include the impacts of such eviction.<sup>206</sup> CDFW guidelines demand that eviction impacts be evaluated under

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<sup>204</sup> *Id.* at p. 11.

<sup>205</sup> DEIR, p. 3.4-50.

<sup>206</sup> **Exhibit A:** Cashen Comments, p. 11.

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CEQA.<sup>207</sup> Impacts associated with eviction include: (a) significant loss of burrows and habitat for reproduction and other life history requirements; (b) increased stress on burrowing owls and reduced reproductive rates; (c) increased depredation; (d) increased energetic costs; and (e) risks posed by having to find and compete for available burrows.<sup>208</sup> The need to evaluate these impacts is heightened by evidence that translocation results in fewer breeding pairs of owls at the mitigation site than the original site.<sup>209</sup> Furthermore, the DEIR does not require implementation of the Applicant’s Burrowing Owl Exclusion Plan nor CDFW approval of such a plan.<sup>210</sup>

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c. The DEIR Lacks Substantial Evidence Supporting its Finding that Cumulatively Considerable Impacts to Burrowing Owl will Be Less than Significant.

The Project will cause cumulatively considerable impacts to burrowing owls.<sup>211</sup> Habitat loss, habitat degradation and fragmentation are the greatest threats to burrowing owls in California.<sup>212</sup> As Mr. Cashen explains, preserving large populations of burrowing owls, such as that on the Palo Verde Mesa, is essential for preserving the state-wide population.<sup>213</sup> The DEIR provides no evidence that the County has developed a plan for the cumulative loss of habitat to borrowing owl.<sup>214</sup> The County’s track record in preserving burrowing owl reflects the lack of an enforceable plan, as Blythe Solar Power Project, Blythe Mesa Solar Project, and McCoy Solar Energy Project led to the loss of 14,008 acres of burrowing owl habitat and only 204.5 acres of compensatory habitat.<sup>215</sup> Thus, the DEIR lacks substantial evidence supporting the finding that the Project’s cumulatively considerable impacts on burrowing owl will be mitigated to less than significant.<sup>216</sup>

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<sup>207</sup> *Id.*

<sup>208</sup> *Id.*

<sup>209</sup> *Id.* at p. 11 – 12.

<sup>210</sup> *Id.* at p. 12.

<sup>211</sup> *Id.* at p. 18.

<sup>212</sup> *Id.*

<sup>213</sup> *Id.* at p. 19.

<sup>214</sup> *Id.* at p. 18.

<sup>215</sup> *Id.*

<sup>216</sup> *Id.* at p. 19.

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d. Mitigation Measure BIO-6 is Insufficient for Reducing Impacts to Burrowing Owls to Less than Significant.

Mitigation Measure BIO-6 is insufficient to reduce impacts to burrowing owl to a less than significant level for a variety of reasons. In his comments, Mr. Cashen extensively expands on the following flaws.

First, the DEIR’s description of the proposed 146-acre habitat compensation land fails to provide any evidence that the land will actually be used and managed as compensatory habitat.<sup>217</sup> Also, the proposed compensatory habitat is bisected by the Project’s gen-tie line and numerous transmission line corridors which will reduce the mitigation value of the compensatory habitat.<sup>218</sup> Furthermore, the DEIR fails to reveal the criteria used to determine that the 146 acres is of “equal value or better” than the land impacted.<sup>219</sup>

The lack of description concerning the 146-acre habitat compensation is particularly concerning due to the disparity between burrowing owl habitat taken and preserved in connection with previous solar projects in the Chuckwalla Valley.<sup>220</sup> The Project, combined with just one other solar project, for example, will eliminate a further 5,000 acres of burrowing owl habitat and threaten the viability of the burrowing owl population on the western border of Blythe and accelerate the overall decline of the species.<sup>221</sup> This cumulatively considerable impact cannot be mitigated by a total of 146 acres compensatory habitat.<sup>222</sup> CDFW has stated that permanent habitat loss necessitates replacement with equivalent or greater habitat area.<sup>223</sup>

Second, the proposed buffers are insufficient for mitigating burrowing owl impacts. The DEIR proposes buffers shorter than those recommended by CDFW, fails to set forth qualifications for the supervising biologist, and fails to recognize that screening burrows is an inappropriate justification for reducing buffer distances.<sup>224</sup>

<sup>217</sup> *Id.* at p. 30.

<sup>218</sup> *Id.*

<sup>219</sup> *Id.*

<sup>220</sup> *See, id.* at p. 30 – 31; *Id.* at p. 18.

<sup>221</sup> *Id.* at p. 31.

<sup>222</sup> *See, id.* at p. 30 – 31.

<sup>223</sup> *Id.* at p. 30.

<sup>224</sup> *Id.* at p. 31 – 32.

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Third, the DEIR and the Burrowing Owl Monitoring and Mitigation Plan lack success criteria. The proposed mitigation provides no means of distinguishing between resident owls at mitigation sites and owls evicted from the Project site.<sup>225</sup> The proposed mitigation fails to protect owls evicted from the Project site, allowing them to die without supplemental mitigation to compensate for the take.<sup>226</sup> There are also no performance standards for the compensatory land.<sup>227</sup>

Finally, the DEIR’s proposed pre-construction surveys are insufficient for avoiding and minimizing impacts, proposed artificial burrow maintenance is insufficient, and proposed disturbance of borrows is noncompliant with current CDFW guidance.<sup>228</sup> Due to the DEIR’s failure to establish complete and accurate existing environmental conditions for burrowing owl, flaws in proposed mitigation measures, and the persistent presence of cumulatively considerable impacts, the DEIR lacks substantial evidence supporting the conclusion that the Project’s impacts to burrowing owl will be mitigated to less than significant.

ii. *The DEIR Lacks Substantial Evidence Supporting its Finding that Impacts to Mojave Fringe Toed Lizard will be than Significant*

a. The DEIR Fails to Describe the Existing Setting for Mojave Fringe-toed Lizard

As described above, The DEIR’s description of the existing environmental setting as it concerns Mojave Fringe-toed lizard is incomplete and inadequate. The DEIR improperly assumes that failure to detect the species during reconnaissance-level surveys is evidence of Mojave Fringe-toed lizard’s absence, and the DEIR is internally inconsistent as to whether Mojave Fringe-toed lizard exists on the site. Without an accurate and stable description of the existing setting for Mojave Fringe-toed lizard, the DEIR’s impacts analysis on the lizard lacks substantial evidence supporting its finding that impacts to the Mojave Fringe-toed lizard will be mitigated to less than significant.

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<sup>225</sup> *Id.* at p. 32.

<sup>226</sup> *Id.*

<sup>227</sup> *Id.* at p. 33.

<sup>228</sup> *Id.*

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b. The DEIR Fails to Propose Mitigation Measures to Address Cumulatively Considerable Impacts

All known occurrences of the Mojave Fringe-toed lizard will be impacted by projects in the Chuckwalla Valley.<sup>229</sup> The loss of the Chuckwalla metapopulation of Mojave Fringe-toed lizard would jeopardize the overall population of Mojave Fringe-toed lizard.<sup>230</sup> Although the Project is within the range of the lizard, the DEIR fails to propose any mitigation measures to address cumulatively considerable impacts on the Mojave Fringe-toed Lizard.<sup>231</sup> Thus, the DEIR lacks substantial evidence supporting a finding that cumulatively considerable impacts will be mitigated to less than significant.<sup>232</sup>

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c. Mitigation Measure BIO-8 is Insufficient for Reducing Impacts to Mojave Fringe-toed Lizard to Less than Significant

Mitigation Measure BIO-8 is insufficient for reducing impacts to Mojave Fringe-toed lizard to less than significant levels. First, Mitigation Measure BIO-8 proposes compensatory dune habitat for Mojave Fringe Toed lizard, but the DEIR fails to quantify the dune habitat that the Project will eliminate or map the dune habitat on the Project site.<sup>233</sup> Because the DEIR wholly lacks an adequate description of the setting and impact analysis necessary to determine whether mitigation is sufficient, the DEIR lacks any evidence to support whether the mitigation is sufficient to reduce significant impacts. Indeed, the DEIR contains no information on how it calculated the required mitigation habitat.<sup>234</sup> The DEIR also lacks substantial evidence supporting its conclusion that such mitigation has been successful in regards to similar projects in the area.<sup>235</sup> Finally, Mitigation Measure BIO-8 fails to provide compensatory habitat for indirect impacts on Mojave Fringe-toed lizard, which may be as harmful as permanent habitat loss and direct impacts.<sup>236</sup>

O3-53

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<sup>229</sup> *Id.* at p. 21.

<sup>230</sup> *Id.*

<sup>231</sup> *Id.*

<sup>232</sup> *Id.*

<sup>233</sup> *Id.* at p. 42.

<sup>234</sup> *Id.* at p. 42 – 43.

<sup>235</sup> *Id.* at p. 43.

<sup>236</sup> *Id.*

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Second, Mitigation Measure BIO-8 fails to mitigate significant cumulatively considerable impacts on the Mojave Fringe-toed lizard in the Chuckwalla Valley, fails to require compensatory habitat in the Chuckwalla Valley where the impact will occur, and fails to ensure that compensatory habitat is available in the Chuckwalla Valley.<sup>237</sup> Because the Chuckwalla Valley is increasingly pressured by solar project development, the Chuckwalla Valley may lack suitable compensatory habitat.<sup>238</sup> It is critical that compensatory habitat be obtained in the Chuckwalla Valley because the Chuckwalla metapopulation of Mojave Fringe-toed lizard is crucial to the overall species' survival.<sup>239</sup> If compensatory habitat is obtained outside the Chuckwalla Valley, then the mitigation will do nothing to mitigate the Project's significant adverse impacts on the Chuckwalla Valley metapopulation.<sup>240</sup>

O3-54

Third, Mitigation Measure BIO-8 fails to quantify the in-lieu fee for compensatory habitat.<sup>241</sup> The measure fails to provide the costs, or even an estimate of costs, related to habitat improvements, long-term maintenance, and management.<sup>242</sup> The measure also fails to describe how funds will improve habitat.<sup>243</sup>

O3-55

The DEIR lacks standards for compensatory habitat and fails to designate an appropriate authority (such as CDFW) for approving the Applicant's compensatory habitat proposal.<sup>244</sup> Thus, the DEIR lacks substantial evidence that Mitigation Measure BIO-8 will reduce the Project's impacts to Mojave Fringe-toed lizard to less than significant.<sup>245</sup>

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<sup>237</sup> *Id.* at p. 43.

<sup>238</sup> *Id.*

<sup>239</sup> *Id.*

<sup>240</sup> *Id.*

<sup>241</sup> *Id.*

<sup>242</sup> *Id.*

<sup>243</sup> *Id.*

<sup>244</sup> *Id.* at p. 43 – 44.

<sup>245</sup> *Id.* at p. 44.

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iii. *The DEIR Lacks Substantial Evidence Supporting its Finding that Impacts to Desert Tortoise will be Less than Significant*

a. The DEIR Fails to Describe the Existing Setting for Desert Tortoise

As described above, the DEIR fails to describe an adequate baseline against which impacts to desert tortoise may be measured because the DEIR fails to include protocol level surveys and failed to consider that agricultural fields may be used by desert tortoises as a connectivity corridor. The fact that the DEIR acknowledges several hundred acres of desert tortoise habitat will be significantly impacted by the Project makes the lack of an accurate and complete baseline even more damaging to the DEIR’s impacts analysis.

O3-56

b. Mitigation Measures are Insufficient for Reducing Significant Impacts to Desert Tortoise to a Less than Significant Level

The DEIR acknowledges that, even with implementation of Best Management Practices (“BMPs”), the Project may have a significant impact on desert tortoise because of the Project’s impact on habitat.<sup>246</sup> The DEIR suggests Mitigation Measures BIO-1 and BIO-5 will reduce the impact to a less than significant level.<sup>247</sup> However, Mitigation Measures BIO-1 and BIO-5 fail to address *habitat loss*, and instead simply suggest bi-weekly monitoring and measures to avoid take of the species during construction.<sup>248</sup> By not providing compensatory mitigation, the DEIR’s proposed mitigation violates NECO, which requires project proponents to provide compensatory habitat if a project impacts desert tortoise habitat.<sup>249</sup> Finally, the DEIR lacks a Raven Management Plan, which is required by USFWS guidance aimed at reducing raven predation of desert tortoises that is caused by renewable energy projects.<sup>250</sup>

O3-57

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<sup>246</sup> DEIR, p. 3.4-38.

<sup>247</sup> *Id.*

<sup>248</sup> **Exhibit A:** Cashen Comments, p.13.

<sup>249</sup> *Id.* at p. 28.

<sup>250</sup> *Id.* at p. 29.

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c. The Project will lead to Cumulatively Considerable Impacts on the Desert Tortoise

The Project will cause cumulatively considerable impacts to the desert tortoise through habitat loss, creating favorable conditions for predators of the desert tortoise predators (ravens), fugitive dust, invasive plants, trash, and habitat fragmentation.<sup>251</sup> As described above, though such Projects may not be significant to the Project site alone, these impacts may be cumulatively considerable given the high number of projects in the region and stress they cause on desert tortoise in the Chuckwalla Valley, Palo Verde Mesa and associated wildlife corridors. Due to the DEIR's failure to establish a complete and accurate baseline for measuring impacts, the inability of proposed mitigation measures to combat habitat loss, and the cumulatively considerable impacts of the Project, the DEIR lacks substantial evidence supporting its finding that impacts to Desert Tortoise will be mitigated to a less than significant level.

O3-58

iv. *The DEIR Lacks Substantial Evidence Supporting its Finding that Impacts to Golden Eagles will be Less than Significant*

a. The DEIR Fails to Describe the Existing Setting for Golden Eagle

As described above, the DEIR fails to provide a complete and accurate baseline against which Project impacts to golden eagles may be measured. The DEIR relies on surveys of golden eagles that were conducted for different projects five or more years ago. Therefore, the DEIR's finding that impacts to golden eagle will be less than significant is based on analysis without a proper baseline.

O3-59

b. The Golden Eagle Risk Assessment Upon which the DEIR Relies is Fatally Flawed

First, the DEIR fails to rely on a Golden Eagle Risk Assessment prepared for the Project, instead relying on an assessment prepared for the McCoy Solar Energy Project in 2011.<sup>252</sup> Second, Dr. Joel Pagel of USFWS reviewed the Golden Eagle Risk Assessment for the McCoy Solar Energy Project and identified numerous flaws

O3-60

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<sup>251</sup> *Id.* at 23.

<sup>252</sup> *Id.* at 12.

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in its methodology and conclusions.<sup>253</sup> Mr. Cashen’s comments on the current Project adopt Dr. Pagel’s comments by reference.<sup>254</sup> Among the flaws identified by Dr. Pagel are the risk assessment’s lack of analysis regarding direct and indirect loss of foraging habitat and potential foraging habitat, and disturbances of locations where eagles are most active.<sup>255</sup> Dr. Pagel also criticized the lack of cumulative impacts analysis, particularly impacts to eagles 10 to 140 miles from the McCoy Solar Energy site.<sup>256</sup> Finally, Dr. Pagel also concluded that the risk assessment was flawed because it contained no analysis of *bald eagles*, despite that fact that bald eagles use the Colorado River corridor for migration and winter movements.<sup>257</sup>

O3-60

c. Proposed Mitigation Measures Fail to Address Golden Eagle Habitat Loss

The DEIR recognizes that the Project will reduce suitable golden eagle habitat.<sup>258</sup> Furthermore, the DEIR acknowledges that habitat may be lost adjacent to areas that will be cleared.<sup>259</sup> The Project may cause weed infestations that reduce habitat.<sup>260</sup> Mitigation Measure BIO-7 (Bird and Bat Conservation Strategy), however, fails to address such habitat loss, although evidently its purpose is to reduce significant impacts to birds.<sup>261</sup> Because the DEIR fails to contain mitigation measures that reduce significant impacts to golden eagle habitat to a less than significant level, the DEIR lacks substantial evidence supporting its finding that impacts to golden eagle will be less than significant.<sup>262</sup>

O3-61

d. The DEIR Lacks Substantial Evidence that Cumulatively Considerable Impacts to Golden Eagles Will Be Less Than Significant

The DEIR’s conclusion that cumulatively considerable impacts to golden eagle will be less than significant is not supported by substantial evidence for a

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<sup>253</sup> See **Exhibit D:** Pagel Comments on Golden Eagle Risk Assessment prepared for McCoy Solar Energy Project (“Pagel Comments”).

<sup>254</sup> **Exhibit A:** Cashen Comments, p. 12.

<sup>255</sup> **Exhibit D:** Pagel Comments, p. 1.

<sup>256</sup> *Id.*

<sup>257</sup> *Id.* at p. 3 – 4.

<sup>258</sup> DEIR, p. 3.4-40

<sup>259</sup> *Id.*

<sup>260</sup> *Id.*

<sup>261</sup> **Exhibit A:** Cashen Comments, p. 13.

<sup>262</sup> *Id.*

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variety of reasons.<sup>263</sup> First, the Project’s proposed mitigation measures and BMPs fail to provide mitigation for habitat loss, fragmentation, and degradation.<sup>264</sup> Second, the DEIR’s cumulative impacts analysis failed to adhere to USFWS guidelines for cumulative impacts analysis, which, among other requirements, mandates analysis of impacts to the golden eagle population within the average natal dispersal distance of 140 miles.<sup>265</sup> Third, the DEIR lacks remedial measures if a golden eagle is killed or injured by the Project’s transmission lines.<sup>266</sup> Fourth, as described above, the DEIR fails to demonstrate that golden eagle surveys adhering to USFWS guidelines have ever been conducted in the Project area.<sup>267</sup>

Fifth, and a particular cause for concern, the DEIR’s conclusion on cumulative impacts contradicts USFWS cumulative impact analysis for other solar projects in the area, in which USFWS determined that projects would have the potential to significantly impact golden eagles through the loss of foraging habitat.<sup>268</sup>

Finally, as noted above, the DEIR’s description of the existing conditions required to enable an accurate cumulative impacts analysis is too limited, and fails to account for cumulative impacts to golden eagles which nest in adjacent mountain ranges but forage on the Project site.

v. *The DEIR Lacks Substantial Evidence Supporting its Finding that Impacts to Desert Kit Fox, American Badger, and Special-Status Bats and Birds will be Less than Significant*

a. Mitigation Measures Proposed for the American Badger and Desert Kit Fox Fail to Mitigate Impacts to a Less than Significant Level

The DEIR’s proposed mitigation measures fail to address habitat loss, fragmentation, and degradation in regards to the American Badger and Desert Kit Fox.<sup>269</sup> Though the DEIR lists habitat loss and fragmentation as significant

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<sup>263</sup> *Id.* at p. 21.  
<sup>264</sup> *Id.* at p. 19.  
<sup>265</sup> *Id.* at p. 19 – 20.  
<sup>266</sup> *Id.* at p. 20.  
<sup>267</sup> *Id.*  
<sup>268</sup> *Id.*  
<sup>269</sup> *Id.* at p. 13 – 14.



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impacts of the Project, the DEIR’s mitigation measures fail to hone in on the specific impacts of habitat loss and fragmentation.<sup>270</sup> The DEIR admits that BMPs will only reduce significant impacts to “some extent.”<sup>271</sup> Thus the DEIR lacks substantial evidence supporting its finding that mitigation measures will reduce significant impacts to American badgers and desert kit fox to a less than significant level.<sup>272</sup>

Second, the DEIR lacks substantial evidence supporting its claim that cumulatively considerable impacts to American badger and Desert Kit fox will be less than significant.<sup>273</sup> The proliferation of solar projects in the region is causing habitat loss, degradation, and fragmentation in regards to American badger and Desert kit fox, and the Project further reduces habitat without providing compensatory habitat.<sup>274</sup>

Third, mitigation measures proposed for preventing take of American badger and desert kit fox fail to address the behaviors of these species.<sup>275</sup> Mitigation Measure BIO-3 (American Badger) and Mitigation Measure BIO-4(Desert Kit Fox) both 1) fail to designate the pre-construction survey area and 2) fail to require surveys sufficiently close to the date of construction that will be capable of detecting American badger and desert kit fox.<sup>276</sup>

b. Mitigation Measure BIO-7 (Bird and Bat Conservation Strategy) Fails to Mitigate Significant Impacts to Birds and Bats to a Less than Significant Level

The Project’s Bird and Bat Conservation Strategy (“BBCS”) is mired in flaws due to the lack of certainty concerning its implementation, lack of survey data, adoptive management flaws, overly high adoptive management triggers, a vague monitoring program, and its overall approach. The result of these flaws is that the DEIR lacks substantial evidence supporting the DEIR’s conclusion that the Project’s impacts to bats and birds—among them the golden eagle, Le Conte Thrasher, and Loggerhead Shrike—will be mitigated to less than significant.<sup>277</sup> Mr.

<sup>270</sup> See, *id.*

<sup>271</sup> *Id.* at p. 13.

<sup>272</sup> See, *id.* at p. 10.

<sup>273</sup> See, *id.* at p. 22.

<sup>274</sup> *Id.*

<sup>275</sup> *Id.* at p. 26 – 27.

<sup>276</sup> *Id.*

<sup>277</sup> *Id.* at p. 42.



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Cashen describes these flaws in extensive detail, and some of the key failings are described herein.

First, the BBCS relies on wildlife surveys conducted over five years ago in connection with projects other than the Palo Verde Mesa Solar project.<sup>278</sup> Such surveys violate CDFW and USFWS guidelines for developing a BBCS.<sup>279</sup> Also, USFWS and CDFW point out that some of these prior surveys for other projects are themselves flawed, which undermines the underlying assumptions on which the Project’s BBCS is based.<sup>280</sup>

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Second, the Project site is within eight miles of the Colorado River corridor and the DEIR’s assumption that the diverse array of birds in the corridor will only “incidentally” use the Project site lacks substantial evidence.<sup>281</sup> The BBCS itself contradicts the assumption that birds will use the Project site only by chance because the BBCS states that the Project site may be used “as foraging habitat by raptors and waterfowl that are using the Colorado River.”<sup>282</sup> The presence of suitable foraging habitat between the Project site and the Colorado River does not constitute substantial evidence that birds from the Colorado River will not use the Project site—such an assumption is an oversimplification of factors involving species-specific preferences, availability of food, habitat accessibility, and weather patterns.<sup>283</sup> Currently, there are 314 acres of citrus orchards within the Project site and the Project will bring solar panels to the site.<sup>284</sup> Both of these features are highly attractive to birds present in the Colorado River corridor.<sup>285</sup>

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Third, the risk assessment of the BBCS is fallacious for numerous reasons. In contrast to the BBCS’ claims, the Project’s transmission lines are close to water sources, including a vegetated irrigation canal and four ponds, which increase the likelihood of bird and bat occurrence.<sup>286</sup> Mr. Cashen describes the Project site as “large,” which implicates at least a moderate risk to birds and bats in and of

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<sup>278</sup> *Id.* at p. 34.

<sup>279</sup> *Id.*

<sup>280</sup> *Id.* at p. 35.

<sup>281</sup> *Id.* at p. 36.

<sup>282</sup> DEIR Appendix D: “Biological Resources,” p. 17.

<sup>283</sup> **Exhibit A:** Cashen Comments, p. 36.

<sup>284</sup> *Id.* at p. 36 - 37.

<sup>285</sup> *Id.* at p. 37 – 38.

<sup>286</sup> *Id.* at p. 37.

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itself.<sup>287</sup> The glare and polarized light from solar projects are known to attract insects, which, in turn, attract birds.<sup>288</sup> These reasons, among others, cause Mr. Cashen to conclude that the DEIR lacks substantial evidence to support the finding that the Project proposes “low” risk to birds and bats.<sup>289</sup> Thus, the BBCS is insufficient for mitigating impacts because it is based on the erroneous assumption that the Project poses a “low” risk to birds and bats.<sup>290</sup>

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Fourth, the BBCS’ monitoring program is insufficient because it proposes limiting monitoring to “incidental detections.”<sup>291</sup> As Mr. Cashen explains, “incidental detections” are not a scientifically acceptable method for estimating annual mortality rates.<sup>292</sup> The BBCS also fails to describe the duration of monitoring efforts, which renders monitoring ineffective because avian abundance and species varies widely from year to year and the adaptive management triggers are set too high (see below).<sup>293</sup> The BBCS also fails to define the sampling area, intervals, intensity, and frequency for monitoring.<sup>294</sup>

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Fifth, the adaptive management triggers in the BBCS allow for significant, unmitigated impacts on bird and bat species.<sup>295</sup> The current BBCS allows for mortality up to 1,800 native birds, 135 raptors, or 1,350 bats *per year* before adaptive management is triggered.<sup>296</sup> Over the 30-year span of the requested CUP, such a death rate would lead to the death of *54,000 native birds, 4,050 raptors, and 40,500 bats*, and still adaptive management *would not be triggered* based on the current thresholds.<sup>297</sup> Incredibly, if such thresholds are exceeded, the Applicant *would still not be required* to perform adaptive management because the BBCS states that adaptive management *may* be triggered in the event that thresholds are exceeded.<sup>298</sup> Overall, the BBCS is so overwhelmed with flaws that the DEIR lacks

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<sup>287</sup> *Id.* at p. 38.

<sup>288</sup> *Id.*

<sup>289</sup> *Id.* at p. 39.

<sup>290</sup> *Id.* at p. 42.

<sup>291</sup> *Id.* at p. 40 – 41.

<sup>292</sup> *Id.* at p. 40.

<sup>293</sup> *Id.* at p .41.

<sup>294</sup> *Id.*

<sup>295</sup> *Id.* at p. 40.

<sup>296</sup> *Id.*

<sup>297</sup> *Id.*

<sup>298</sup> *Id.*

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substantial evidence supporting the DEIR's conclusion that impacts to birds and bats will be mitigated to a less than significant level.<sup>299</sup>

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**V. CONCLUSION**

The Project presents significant environmental impacts that the County failed to address in the DEIR, which must be disclosed, analyzed and mitigated in a revised DEIR prior to Project approval. The DEIR Project description is improperly truncated. The DEIR fails to adequately establish the existing setting upon which to measure impacts to biological resources. The DEIR also fails to include an adequate analysis of and mitigation measures for the Project's potentially significant impacts. The DEIR's conclusions lack substantial evidence as required by CEQA. Due to these significant deficiencies, a revised DEIR that addresses these inadequacies must be recirculated.

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Sincerely,



Ned C. Thimmayya



Tanya A. Gulesserian

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<sup>299</sup> *Id.* at p. 42.