



November 13, 2020

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Sent by E-Mail: [CEQA/comments@slc.ca.gov](mailto:CEQA/comments@slc.ca.gov)

Subject: Stagecoach Solar Project NOP Comments

Dear Ms. Mongano:

The Morongo Basin Conservation Association (MBCA) is pleased to have this opportunity to provide comments and provide insights on the issues that must be addressed within an EIR for the above project.

This project comes at time where our future is at a tipping-point and provides an opportunity to consider and address the many issues highlighted by this proposed project. While the imperative to transition off fossil fuels is often provided as an imperative in addressing climate change, this transition must not be made at the expense of the natural and human communities that would be unavoidably and irreparably impacted by the construction of this project.

MBCA has joined with many other individuals and organizations to sign-on to a comprehensive coalition letter that identifies many of the issues that must be addressed within the DEIR for this ill-advised project. These issues include:

- A.** Project descriptions provided with the CSLC's "Environmental Justice Outreach Letter" and in the project application are inconsistent as to the gross area of the project.
- B.** The EIR must thoroughly consider the "Indirect and Secondary Effects," "Growth-Inducing Impacts" and overall "Cumulative Effects" of the proposed project that would validate the construction of the Calcite substation and hence the revival of the Coolwater-Lugo transmission project and the construction of further utility scale renewable energy projects in the area.

- C.** The EIR must thoroughly consider all of the substantial adverse effects that the proposed project and related development would have on natural communities and wildlife connectivity corridors.
- D.** The EIR must independently assess the amount of soil disturbance and vegetation destruction that would be caused by construction and operation of the proposed project and related development, the amount of dust and valley fever spores that they would emit and the extent to which human health would be compromised by such emissions.
- E.** The EIR must independently assess the extent to which the proposed project and related development would have substantial adverse effects on visual aesthetics (SH247 as a Scenic Highway).
- F.** The EIR must include a complete and comprehensive assessment as to the extent to which the proposed project and related development would conflict with the planning goals and policies enunciated by San Bernardino County. In particular, the Renewable Energy and Conservation Element.
- G.** Reconcile the conflict with San Bernardino County Supervisors' February 17, 2016 Resolution and DRECP position paper.
- H.** The EIR must address the manner in which the proposed project, generation transmission line and Calcite substation would conflict with the MSHCP being jointly developed by the County and the Town of Apple Valley.
- I.** Reconcile the inherent conflict with The California Protected Areas Database (CPAD).
- J.** The EIR must thoroughly consider "Significant and Unavoidable Impacts."
- K.** The EIR cannot "Tier Off" the DRECP.
- L.** The EIR must thoroughly examine the amount of water required for the construction, operation and maintenance (including ongoing dust Suppression) of the proposed project and related development, as well as the impact such widespread and intense industrial activities would have on development on the County's finite and already-threatened groundwater resources.
- M.** The EIR must thoroughly examine the impacts on surface waters that the proposed project and related development would have by reducing and re-directing natural surface water flows.
- N.** The EIR must include an in-depth study of the effects that the proposed project and cumulative development would have on Lucerne Valley communities.
- O.** The EIR must analyze a broad array of environmental justice impacts that the proposed project and related development would have on the surrounding community (Additional comments on this topic are below).

**P.** The EIR’s analysis must take proper account of the impossibility of restoring natural desert terrain and habitat.

**Q.** The EIR must contain a CEQA-mandated consideration of project alternatives. Especially, the no-project alternative.

**R.** The EIR must incorporate a thorough search for Native American artifacts, campsites and burial grounds in the general area of the proposed project and related development.

In addition to the above we present the following issues that must be addressed within the EIR:

### **Environmental Justice**

During the October 28, 2020 2:00 PM Scoping Meeting it was mentioned that CEQA does not require consideration of community socio-economic factors. I bring to your attention the 2012 Fact Sheet Environmental Justice at the Local and Regional Level, Legal Background presented by Kamala D. Harris, Attorney General. <sup>1</sup>

California Environmental Quality Act (CEQA) Under CEQA, “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects ....” (Pub. Res. Code, § 21002.) **Human beings are an integral part of the “environment.” An agency is required to find that a “project may have a ‘significant effect on the environment’” if, among other things, “[t]he environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly[.]”** (Pub. Res. Code, § 21083, subd. (b)(3); see also CEQA Guidelines, § 15126.2 [noting that a project may cause a significant effect by bringing people to hazards].) CEQA does not use the terms “fair treatment” or “environmental justice.” Rather, CEQA centers on whether a project may have a significant effect on the physical environment. Still, as set out below, by following well-established CEQA principles, local governments can further environmental justice. (Page 2 of 6) (Bold added)

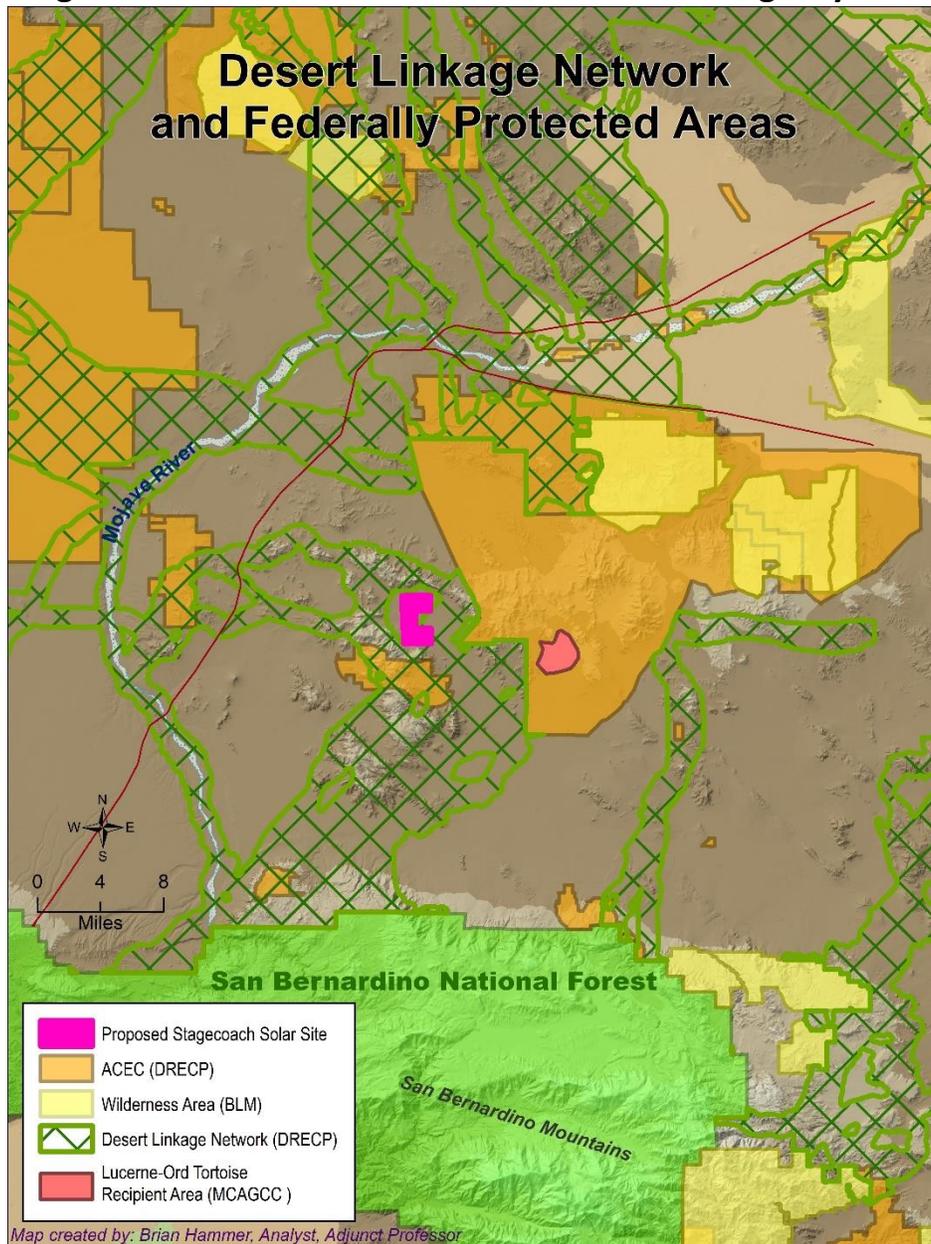
The April 20 Environmental Justice Community letter to Mr. Randy Collins describes the location of the Stagecoach Solar Project (Project) within the Lucerne Valley CSA 29.

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<sup>1</sup> [https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/ej\\_fact\\_sheet.pdf](https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/ej_fact_sheet.pdf) Attached

Figures 1 and 2 map the extent of the Disadvantage and Severely Economically Disadvantaged Community areas in Lucerne Valley.<sup>2</sup>

**Stagecoach NOP - Attachment 3.0: Permits and Agency Coordination**

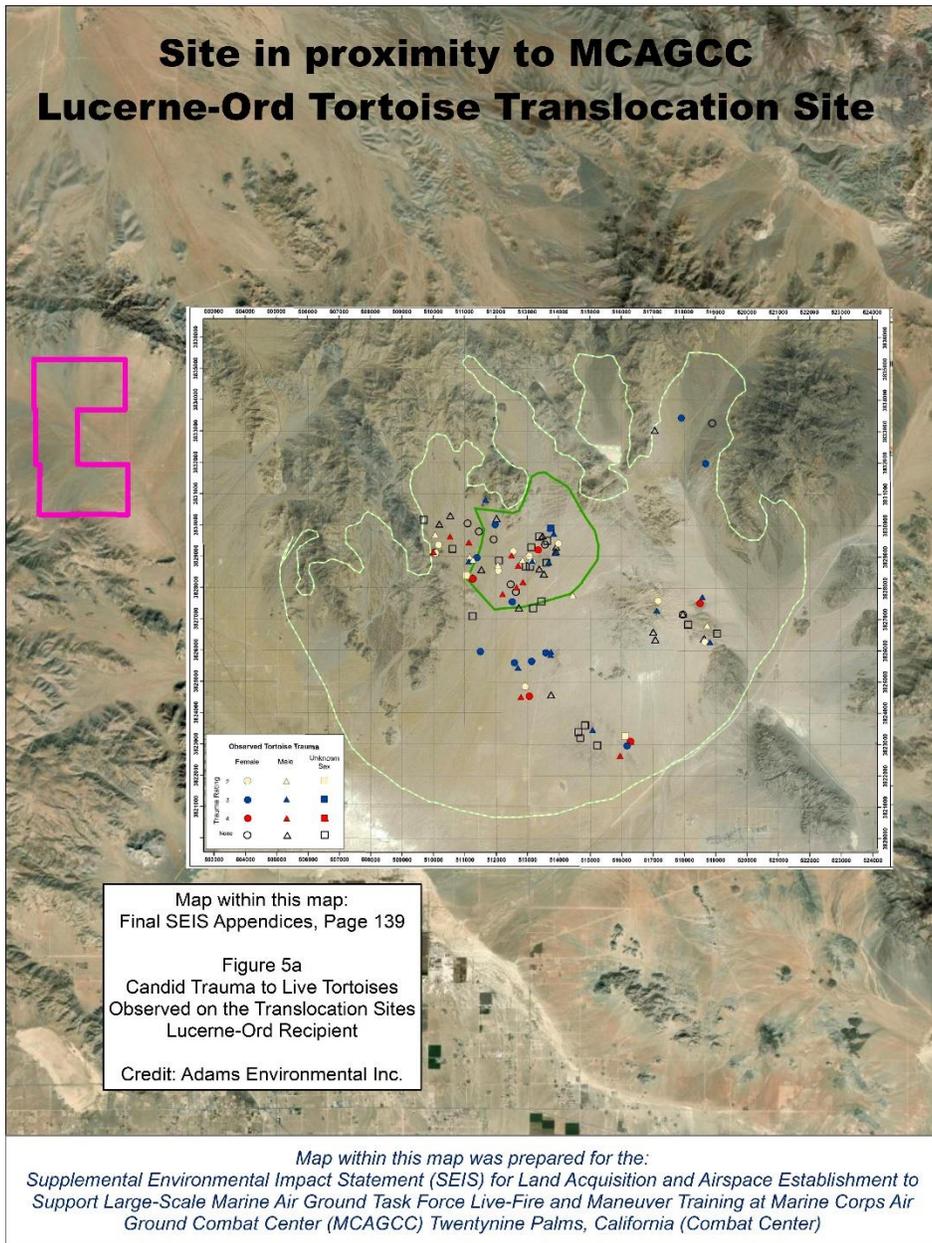


The list of agencies to consult for Project coordination does not include the Marine Corps Air Ground Combat Center (MCAGCC). As part of their expansion into Johnson Valley MCAGCC was required to translocate almost 1,100 desert tortoises in the expansion area.<sup>3</sup> In 2017 the tortoises were released into the Ord-Rodman DWMA adjacent to the Desert Linkage Network where the Project is sited. See Figures 1 & 2.

**Figure 1** North Lucerne Valley showing Wildlife Linkage Network, ACECs, and DWMA with Stagecoach Solar and the MCAGCC Desert Tortoise release area.

<sup>2</sup> April 20, 2020 Environmental Justice letter to Mr. Randy Collins from Lucerne Valley Community Associations, Businesses, organizations, and individuals

<sup>3</sup> <https://www.marinecorpstimes.com/news/your-marine-corps/2017/04/17/desert-tortoises-relocated-for-expansion-of-marine-combat-center-at-twentynine-palms/>



**Figure 2:** Stagecoach Solar (pink outline) in proximity to the MCAGCC release site for desert tortoise in the Ord-Rodman Desert Wildlife Management Area (DWMA).

## Carbon Sequestration in the Desert Underground and Climate Change

The 3000-acre Stagecoach project is sited on intact functioning creosote scrub habitat. The plants in this mature creosote scrub are connected underground by a jungle of mycorrhizae which absorbs and stores carbon dioxide. This complex biological web is described and illustrated in a recently published book by Robin Kobaly.<sup>4</sup> Kobaly's book as well as her article in the March 2019 Desert Report<sup>5</sup>, synthesizes the work of numerous

<sup>4</sup> <https://summertree.org/the-desert-underground-book/>

<sup>5</sup> Robin Kobaly. The Desert Under Our Feet: An Extraordinary Biological Web. The Desert Report March 2019. Pages 1, 14-15.

scientists over several decades. Carbon sequestration and storage happens. But how much?

Over a ten-year timeframe, researchers at the University of Nevada, Las Vegas exposed study plots to elevated carbon dioxide levels similar to those expected in 2050.<sup>6</sup> R.D. Evans, the project lead, has stated that “overall, rising CO2 levels may increase the uptake by arid lands enough to account for 4 to 8 percent of current emissions”.<sup>7</sup>

This research provided the data USGS used in 2014 when calculating **Terrestrial Carbon Sequestration in National Parks**.<sup>8</sup> This report gives the metric tons of carbon per hectare being sequestered as well as the Ecosystem Service Value in millions of dollars. This dollar amount considers the land area covered and reveals that within the top 15 parks are the 4 desert parks - Death Valley NP, Mojave Preserve, Joshua Tree NP, and Lake Mead NRA.<sup>9</sup> The desert lands have relatively low sequestration per hectare but lots of undisturbed hectares sequestering C.

For the sake of this discussion let us assume that the project site is similar to the Mojave National Preserve to the east of the Project. Annually the Preserve stores approximately 1.0 metric ton of carbon/hectare/year. The Stagecoach Project’s 3,000 acres equal 1,214 hectares so the Site could sequester 1,214 metric tons of carbon/year. This does not account for the carbon permanently stored in cliché layers at depth. Research indicates for the site to be restored at the end of use, returning to its full functioning capacity, could take from several hundred to 3,000 years. So, conservatively, if you account for the loss of carbon sequestration over 300 years you get 364,200 metric tons of carbon not sequestered. This amount is conservative and does not account for the footprint of the project which will kill the mycorrhizae for some distance outside of the project perimeter or the carbon stored in the buried caliche.

Dr. Michael Allen, Center for Conservation Biology, University of California, Riverside prepared a report in 2014 for the California Energy Commission Energy Research and

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<sup>6</sup> RD Evans, A Koyama, DL Sonderegger. Greater ecosystem carbon in the Mojave Desert after ten years exposure to elevated CO2. Nature Climate Change Letters, 2014. Google Scholar pdf

<sup>7</sup> <https://news.wsu.edu/2014/04/06/research-arid-areas-absorb-unexpected-amounts-of-carbon/#:~:text=PULLMAN%2C%20Wash.,dioxide%20increase%20in%20the%20atmosphere>.

<sup>8</sup> Leslie Richardson, et.al, Terrestrial Carbon Sequestration in National Parks. Natural Resource Report NPS/NRSS/EQD/NRR – 2014/880  
[https://d3n8a8pro7vnm.cloudfront.net/mzca/pages/1440/attachments/original/1566607565/NPS\\_Carbon\\_Sequestration.pdf?1566607565](https://d3n8a8pro7vnm.cloudfront.net/mzca/pages/1440/attachments/original/1566607565/NPS_Carbon_Sequestration.pdf?1566607565)

<sup>9</sup> Ibid. Figure 2, Page 9

Development Division on Carbon Balance in California Deserts: Impacts of Widespread Solar Power Generation.<sup>10</sup> He concludes:

### **5.1 Carbon in Desert Ecosystems and Vegetation Removal**

Large-scale solar development in desert ecosystems has the potential to generate electricity, thereby reducing fossil carbon (C) accumulation in the atmosphere, and in turn, lessening the rates of global warming (e.g., Hernandez et al. 2014).

However, both caliche and organic matter losses compromise the value of solar energy as an alternative to fossil C burning by releasing stored inorganic C into the atmosphere and destroying the ability of the deserts to sequester C. A number of concerns, including loss of inorganic C cycling have been raised with solar development, but the majority of concerns can be addressed with careful attention to siting the facilities and roads (e.g., Hernandez et al. 2014).

Carbon sequestration in the intact creosote scrub proposed for siting the Stagecoach Solar Project must be evaluated under Greenhouse Gas Emission and Climate Change.

### **EIR Alternative Analysis – Executive Order N-82-20**

On October 7, 2020 Governor Newsom issued executive order N-82-20 enlisting California's vast networking of natural and working lands – forest, rangelands, farms, wetlands, coast, deserts, and urban greenspaces – in the fight against climate change.<sup>11</sup> The California Natural Resources Agency is directed to establish the California Biodiversity Collaborative (Collaborative) to bring together governmental partners, Native American Tribes, experts, business and community leaders and other stakeholders from across California to protect and restore the State's biodiversity. The CSLC has thousand of acres of pristine desert lands, which if just left alone, will continue sequestering and storing carbon in perpetuity. Management actions such as protecting wildlife linkage designs from encroachment will help to protect and restore the State's biodiversity. The press release for this Executive Order points out that California is one of the world's 36 biodiversity hotspots with an estimated 5,500 plant species of which 40 percent are endemic, found nowhere else on earth.<sup>12</sup>

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<sup>10</sup> Allen, Michael F., G. Darrel Jenerette, Louis S. Santiago. (University of California, Riverside). 2013. ***Carbon Balance in California Deserts: Impacts of Widespread Solar Power Generation***. California Energy Commission. Publication number: CEC-500-2014-063.

<sup>11</sup> <https://www.gov.ca.gov/wp-content/uploads/2020/10/10.07.2020-EO-N-82-20-.pdf>

<sup>12</sup> <https://www.gov.ca.gov/2020/10/07/governor-newsom-launches-innovative-strategies-to-use-california-land-to-fight-climate-change-protect-biodiversity-and-boost-climate-resilience/>

The three desert areas in California – Sonoran, Mojave, and Great Basin – make up 28% of the state but contain 38% of the native plant species. Of the 2,450 native plant species (with numbers growing) 25% are endemic to the desert.<sup>13</sup>

Of course, the plants need pollinators. As a point of reference, Joshua tree National Park hosts 500-600 species representing 40 genera in 6 (or 7 total) families.<sup>14</sup>

All three deserts are climatologically, topographically, and geologically diverse. Across the skin of the desert there are “more than 100 major mountain ranges, myriad canyons, playas, alkali meadows, badlands, and sprawling dune complexes.”<sup>15</sup>

Figure 3 shows a concentration of California State Lands spread throughout the California Deserts. Much of the land is pristine and diverse. The CSLC must be a member of the Collaborative. **The land parcels must be studied and evaluated for the dollar amount of nature’s services they provide. That estimated dollar amount should be provided to the Commission to support schools. The best alternative to developing pristine desert land is not to develop them at all.**

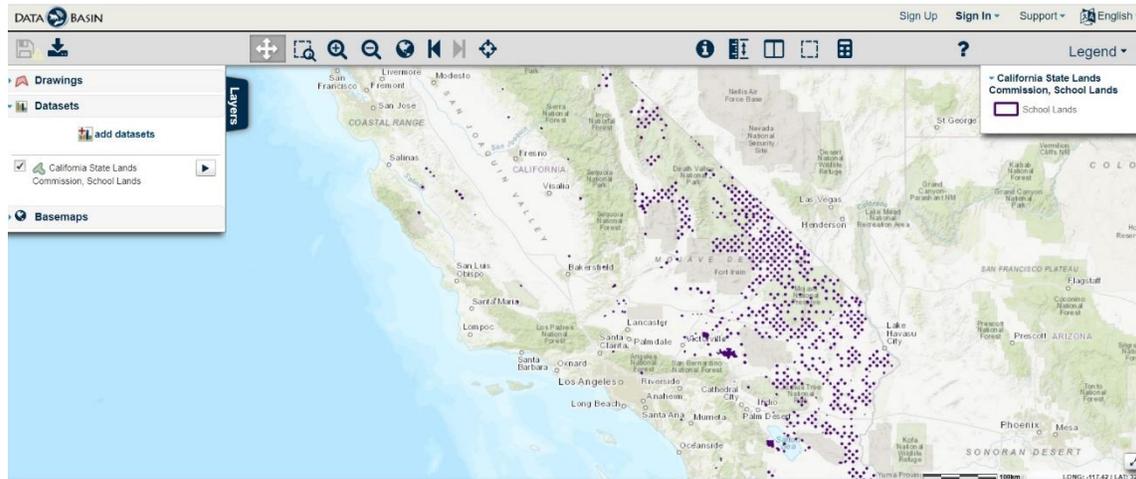


Figure 3: California State Lands Commission holdings throughout the California deserts.

Please also include by reference the Homestead Valley Hwy 247 comments and the comments of Brian and Sue Hammer, Lucerne Valley homeowners. Thank you for your consideration.

Steve Bardwell, president  
Morongo Basin Conservation Association

<sup>13</sup> James M. Andre, and Kara A. Moore. California Deserts, Part 1 Biology and Ecology. Fremontia Vol. 42 No.1, January 2014.

<sup>14</sup> Michael Orr, PhD candidate University of California Riverside, 8/2/2016 presentation at the Black Rock Visitor Center, Joshua Tree National Park.

<sup>15</sup> Andre, Ibid