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Derek Eysenbach
Bureau of Land Management
Yuma Field Office
7341 East 30th Street, Suite A
Yuma, AZ 85365

Via email: deysenbach@blm.gov
BLM_AZ_CRD_SOLAR@blm.gov

**RE: Jove Solar Project Draft Environmental Impact Statement (EIS)
DOI-BLM-AZ-C020-2022-0006-EIS**

Arizona Sportsmen for Wildlife Conservation (AZSFWC) appreciates the opportunity to comment on the Jove Solar Project (Project).

AZSFWC is the leading 501c-3 non-profit organization dedicated to wildlife conservation, habitat improvement, youth recruitment and retention, as well as providing educational opportunities for outdoor enthusiasts on issues important to their passions. AZSFWC consists of 42 member, affiliate, and associate groups that reach across the spectrum of hunting, angling, shooting, outdoor recreation, and businesses from across Arizona. Our member groups alone represent well over 27,000 people from Arizona.

AZSFWC is a longtime advocate for the Arizona Game and Fish Department (AZGFD) who is statutorily responsible for managing all of Arizona's over 800 species of wildlife. The fact the AZGFD maintains a cooperating agency status with the Bureau of Land Management (BLM) and has developed a great working relationship with AZGFD is extremely important for Arizona's wildlife, and outdoor recreationists.

It's no surprise the BLM has targeted the relatively flat, sun drenched, sparsely populated areas of southwest Arizona for these solar energy developments, however, utilizing thousands of acres of the Sonoran Desert landscape for solar arrays is inevitably going to misplace and impact wildlife in these sensitive desert areas. There will also be a negative impact for access to these public lands and diminishing recreational opportunities as well.

We understand the focus on renewable energy projects, and there certainly are benefits, however there are also challenges that come with them too. This Project seems destined for construction, with its proximity to the Cielo Azul Switchyard, Ten West Link, as well as the other infrastructure in close proximity; Interstate 10, El Paso Natural Gas Pipeline, the Central Arizona Project canal, and six other solar projects in the vicinity, which is why the wildlife and recreational access components are so critical in the planning and implementation.

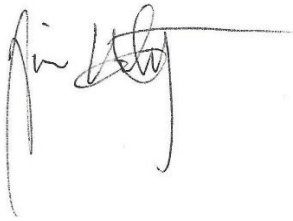
AZSFWC Comments on the BLM Jove Solar Project Draft EIS – 6-3-24

Arizona Sportsmen for Wildlife Conservation
PO Box 75731 New River, AZ 85087

AZSFWC and the 21 organizations on the attached list support the Wash Avoidance Alternative, the AZGFD Requested Actions from their Comment Matrix (#M24-04194011), as well as the following requests associated with the Project.

- Ensure the Project fencing design features support wildlife connectivity.
- Affirm in the Project that recreational and hunting access remains open in the wash.
- Preserve vehicular access to the Palomas-Harquahala Road with a bypass around the Project site.
- Consult with AZGFD to ensure any impact to Sonoran pronghorn is minimal.

Thank you for your consideration!

A handwritten signature in black ink, appearing to read "Jim Unmacht", with a long horizontal line extending to the right.

Jim Unmacht
Executive Director



**Organizations supporting the Wash Avoidance
Alternative in the Jove Solar Project Draft EIS**

Anglers United
AZ Antelope Foundation
AZ Bass Federation
AZ Deer Association
AZ Desert Bighorn Sheep Society
AZ Chapter of National Wildlife Turkey Federation
AZ Council of Trout Unlimited
AZ Flycasters Club
AZ Houndsmen Association
AZ Mule Deer Organization
Conservation First USA
Conserve and Protect AZ
Get Outdoors AZ
Mogollon Sporting Association
Outdoor Experience 4 All
Southern AZ Quail Forever
Southwest Wildlife Foundation
SRT Outdoors
Theodore Roosevelt Conservation Partnership
Wildlife for Tomorrow
Yuma Valley Rod and Gun Club

AZGFD Comment Matrix - Jove Solar DEIS (AGFD #M24-04194011)

Page	Section	Topic	Comment/Observation	Action Requested	Links
1-4 to 1-5	1.4.1	BLM LUP Conformance		The Department appreciates the inclusion of language from the Yuma RMP regarding the WHAs, specifically the Palomas Plain WHA, and associated desired future conditions and management actions. Management action WF-035 states "When impacts within WHAs are unavoidable, allow no net loss or no net impact to occur so that the ecosystem composition, structure, functions, and processes are maintained." The Department requests that the EIS describe how the project would conform with this management action.	
2-5	2.4.1	Design features		The Department recommends creating a Worker Environmental Awareness Program and other training measures for all project personnel during construction and operation of the facility and is available to help review those training programs. The Department also recommends identifying how measures that will be implemented during construction and operation of the facility will be enforced, such as speed limits.	
2-9	2.4.1	"The Applicant would develop plans and procedures that would avoid or minimize impacts to the environment during construction, operation, and decommissioning."	These design features will not avoid or minimize all impacts to the environment, thus the need for an EIS and Chapter 3.	Recommend rephrasing this sentence to state, "The Applicant would develop plans and procedures that would avoid or minimize, <i>where feasible, some of the</i> impacts to the environment during construction, operation, and decommissioning."	
2-9	2.4.1.2	Employee safe work programs/potential work hazards/environmental dangers	A common resolution of worker interaction with native species (correctly or incorrectly) seen as "dangerous" (e.g. various snake species, venomous reptiles, etc) is lethal removal. In practice, non-lethal removal/displacement of these species would be sufficient to resolve the safety risk to both worker and wildlife.	Please include in this section a passage that explicitly calls for application of non-lethal short-distance translocation of all native wildlife species out of the immediate conflict zone except as case-specific consultation with AZGFD and BLM YFO approves of a singular lethal approach.	
2-10 to 2-11	2.4.1.6	Wildlife Monitoring Plan	The Department appreciates that the Wildlife Monitoring Plan would be developed with BLM, AZGFD, and USFWS. The third bullet point states that the plan would include a measure to "preserve 500-foot buffers on either side of the centerline of the desert wash that crosses Section 32..." This feature is unique to the Wash Avoidance Alternative and would not occur in the proposed action and therefore should not be stated as a measure of the Wildlife Monitoring Plan.	Please revise the Wildlife Monitoring Plan to accurately reflect conservation measures that would be implemented based on the alternative selected.	

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2-11	2.4.1.7	Decommissioning and Site Reclamation Plan	The site is currently undeveloped, undisturbed desert scrub habitat that may require active reclamation activities once the project is decommissioned.	Please describe what "applicable industry standards and regulatory requirements" are and what meeting or exceeding them would entail for the decommissioning and site reclamation for this project. Also, please clarify if there are any legal stipulations that require the land to be returned to similar or better ecological conditions relative to conditions at the beginning of the lease period.	
2-11	2.4.1.7	Decommissioning and Site Reclamation Plan		The Department would like to coordinate with the applicant and BLM on development of this plan.	
2-15	2.4.1.11	Habitat Restoration and Integrated Weed Management Plan		The Department would like to coordinate with the applicant and BLM on development of this plan to identify opportunities to provide wildlife habitat and prevent introduction and spread of invasive species to adjacent natural areas.	
2-15 to 2-16	2.4.1.12	Preconstruction Biological Surveys	Sensitive species considerations	The Department requests that Arizona SGCN be included in this design feature and is available to coordinate on measures to reduce potential impacts to these species. Please see the Arizona Wildlife Conservation Strategy website for a list of SGCN.	https://awcs.azgfd.com/
2-16	2.4.1.13	Additional Design Features	The DEIS does not suitably identify how the applicant has committed to the goals identified in this section. For example, based on the information provided in the DEIS, habitat connectivity corridors would not be maintained under Alternative B, and functional habitat would not be preserved at a landscape level in Alternative B or C. It is also unclear why modeling techniques were not used to identify cumulative impacts to biological resources, as they were for visual and cultural resources.	The Department requests that either the biological resources section of the EIS be revised to identify how the applicant has committed to each of the applicable goals such that they will be effectively implemented or that the statement of these commitments be removed from this section. The Department also requests that modeling techniques be used to identify cumulative impacts to biological resources, as they were for visual and cultural resources.	
2-16	2.5	Alternative C (Wash Avoidance)	Alternative C would "avoid construction within the desert wash that crosses the project generally from west-south west to east-northeast... these avoidance areas are referred to as the "no-build" area." Based on this description, all intersections of the wash and the project area should be designated as "no-build;" however only the portion within section 32 is referred to as such. Although the extension of the wash within the western portion of the project is described to be unimpeded, establishing it as an additional "no-build" area with the same conditions as the area in section 32 (i.e. 500' buffer from centerline) would ensure connectivity through the entirety of the site.	The Department requests that the intersection of the wash in the western portion of the project area be established as a "no-build" area with the same conditions as the area in section 32.	

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Figure 2-3		Stormwater feature	The perspective provided by Figure 2-3 suggests that the Stormwater Feature adjacent to the wash and the wash avoidance alternative fencing is not 500' from the wash's centerline. The wash depiction appears to narrow substantially as 51st Street becomes its northern boundary.	The Department recommends adding a 100' traversable north-south open buffer between the stormwater feature and the wash avoidance alternative fencing. This would substantially reduce the potential for that feature to repel animals otherwise motivated to move through the wash corridor. Additionally, the Department would like to have clarifying discussions on the design of infrastructure layout surrounding the western extension of the wash.	
		unimpeded natural westward extension of the desert wash	The "Wash Avoidance Alternative Fencing" (green dashed line) in Figure 2-3 would appear to be the depiction of the incorporation of the desert wash into fencing plans that parallel 51st Street. But it doesn't fully align with the description in the text as one of these lines is perpendicular to 51st Street. That dashed-green line in Figure 2-3 also appears to traverse 1/3 to 1/2 way through the wash corridor, which could reduce permeability of the corridor if built to that alignment.	Please clarify the intended alignment of the fencing plan in the text and Figure 2-3 to ensure that fencing will facilitate the wash's continued availability for use as a wildlife movement corridor.	
		Fencing Plan	Figure 2-3 does not explicitly indicate the location of project exclusion fencing (other than the Wash Avoidance Alternative Fencing). Understanding that people (and thus large wildlife) must be excluded from the primary infrastructure areas, it's worth verifying that the red line is not a suggested comprehensive alignment for that exclusion fencing.	Please validate that Alternative C does not include a plan to fence the Proposed Electrical Connection Corridor in Utility Easement running north to the Cielo Azul Switchyard and Substation location; same with the upstream and downstream intersections of the desert wash with Section 32.	
2-18	2.7	Facilities	Project components that involve greater disturbance (land alteration, noise, human activity, etc.) could cause wildlife avoidance and reduce use of wildlife corridors.	The Department would like to work with BLM on recommendations for locations of power conversion stations, new roads, operations and maintenance building, and other project components in efforts to minimize potential impacts to wildlife movement corridors.	

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2-24	2.7.10.2	Table 2-1	Table 2-1 indicates that several components will result in 0 acres of short- and/or long-term disturbance, but the text provided above describing these components indicates that disturbance will occur.	Unless acreages can be provided to populate disturbance amounts in the table, the Department recommends removing. Including a table with most of the categories either tbd or 0 could be misleading to the reader and contrary to other statements made as to the impacts of the project. The Department requests clarification on how disturbance acreage was calculated for the following components: 1) Topography leveling/cut and fill, which, as described in the text, would result in both short- and long-term disturbance, 2) operations and maintenance facility, which would result in short-term disturbance during construction, as well as the long-term disturbance identified in the table, and 3) fencing, which would result in short-term disturbance during installation, as well as the long-term disturbance identified in the table. The Department would also like clarification on if these numbers apply to both Alternative B and C or if different levels of short- and long-term disturbance would be expected between the two alternatives.	
2-24	2.7.10.3	Temporary Water Storage Ponds	Water storage ponds will attract wildlife as well as cattle.	The Department requests that measures be implemented to prevent potential drowning of wildlife that might access the ponds, such as through construction of escape ramps and floats. Further it is unclear how the temporary water storage ponds will be used, and if they will contain potential contaminants that could impact wildlife. The Department requests BLM clearly identify the uses of these ponds, and if necessary, develop measures for exclusion fencing.	
2-26	2.7.10.8	Lighting during construction	The DEIS states that construction after sunset during the summer will require lighting. It is unclear if summer months are the only time of the year during which nighttime construction activities will occur.	The Department requests clarification on when construction is anticipated to occur and if nighttime activities would be restricted to summer months. The Department recommends using only the minimal amount of light needed and shielding of lights to ensure that only the area requiring illumination is lit to help reduce potential effects to nocturnal wildlife species.	
3-3	3.1.4	Resources and issues eliminated from detailed analysis	This area is used by recreationists for various activities including hunting, wildlife watching, hiking, OHV driving, etc.	The Department encourages including recreation in those resources which are analyzed in detail in Chapter 3.	
3-12	3.3	Species to consider		The Department requests that Arizona Species of Greatest Conservation Need and Species of Recreational Importance be addressed and analyzed in the EIS, per the MOU between BLM Arizona State Office and the Department, which states that the BLM will "fully consider the welfare of Species of Greatest Conservation Need and Species of Recreational Importance in its land use management decisions." Additionally, a list of species that have been found within the project area and the immediate vicinity, along with a list of all species that have the potential to occur within the project based on habitat modeling can be found using the Arizona Online Environmental Review Tool.	https://ert.azgfd.gov/con tent/home

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3-15 - 3-32	3.3	Biological resource impacts	<p>In all impacts sections, the DEIS lists the management plans for Alternatives B and C that would be included but do not analyze how these plans would minimize potential adverse effects. The analysis of impacts also does not identify the anticipated magnitude of those effects, which, as identified in Table 3-1 (p. 3-2), is a key aspect of NEPA. These are two of the most important components to include in NEPA assessments to ensure that potential effects have been thoroughly analyzed and that appropriate measures have been identified to avoid or reduce those potential impacts.</p> <p>Additionally, in all sections, the DEIS states that Alternative C would result in less disturbance than Alternative B but does not provide a suitable comparison between the two alternatives to understand how potential effects would differ.</p>	<p>The Department requests that further analyses be included in the impacts sections of Section 3.3 for Alternatives B and C to identify the anticipated magnitude of impacts and how the design features and management plans would or would not effectively avoid or reduce potential adverse effects.</p> <p>Additionally, the Department requests that Alternative C sections be revised to enable comparison between potential effects of Alternatives B and C, including quantifying amount of land and habitat that would be permanently and temporarily disturbed for each resource and how other differences between the two alternatives would influence the resources.</p>	
3-16	3.3.1.2	Vegetation -- cumulative impacts	<p>The Department is concerned that the findings of the cumulative impacts analysis is inadequate based on the scale at which these impacts are determined. The cumulative impacts analysis only includes projects within 10 miles of the proposed project, but the cumulative effects determination is based on the nearly 20 million acres of these habitat types in Arizona. The analysis and effects determination need to be based on the same scale.</p>	<p>The Department requests that the cumulative effects section be revised to use the same scale for the analysis and effects determination. If the determination is based on the full range of the habitat types in Arizona, the analysis needs to consider all past, present, and reasonably foreseeable future actions within that range. Based on the information provided, it is anticipated that significant cumulative impacts would occur at either scale.</p>	

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3-19	3.3.2.2	Decommissioning impacts on wildlife		The Department requests that assessment of decommissioning effects be revised throughout the EIS to acknowledge that effective restoration of the project area might not occur and that areas surrounding the project area might also be affected. The Department further requests that additional analyses of potential effects be conducted based on these considerations.	<p>Jones et al 2018: https://royalsocietypublishing.org/doi/10.1098/rsob.2017.2577</p> <p>Rowe et al 2020: https://bioone.org/journals/the-american-midland-naturalist/volume-184/issue-2/0003-0031-184.2.129/Lessons-Learned-5-Years-After-Transplanting-and-Seeding-Restoration-Sites/10.1637/0003-0031-184.2.129.short</p> <p>Rowe et al 2022: https://onlinelibrary.wiley.com/doi/pdf/10.1111/rce.13532</p>
3-21 - 3-22	3.3.3.1	Monarch and Sonoran pronghorn	The trends and actions sections for monarch and Sonoran pronghorn do not identify that habitat loss is one of the most significant threats facing these species (except with reference to wildfire for monarch).	The Department requests that habitat loss be identified in these sections and addressed in analyses of potential effects of this project and cumulative impacts to monarch butterflies and Sonoran pronghorn.	<p>monarch: https://monarchjointventure.org/monarch-biology/threats/breeding-habitat-loss</p> <p>pronghorn: https://ecos.fws.gov/docs/recovery_plan/FINAL%20Sonoran%20Pronghorn%20Recovery%20Plan,%202nd%20Revision%2011.16.16.pdf</p>
3-23	3.3.3.1	Sonoran pronghorn	At the end of the first paragraph under "Sonoran Pronghorn" for section 3.3.3.1, it is stated that "the Project lies within two miles of the northern boundary of the Kofa Sub-unit." This is incorrect, the project falls directly within the identified Kofa Sub-unit which spans from the Colorado River East to Highway 85, and from I-10 south to I-8, generally (see Figure 17 in the Sonoran Pronghorn Recovery Plan, 2016). The project may fall 2 miles north of the Kofa National Wildlife Refuge boundary, however the Sub-unit and and refuge have different extents.	The Department requests that the DEIS clarify that the project falls directly within the identified Kofa Sub-unit boundary (USFWS 2016 Recovery Plan , see Figure 17)	<p>https://ecos.fws.gov/docs/recovery_plan/FINAL%20Sonoran%20Pronghorn%20Recovery%20Plan,%202nd%20Revision%2011.16.16.pdf</p>

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3-24	3.3.3.2	Sonoran pronghorn cumulative impacts	It is stated that the Project area "lies near the northern periphery of the historic range of the species, however the 2016 Recovery Plan clearly states that the "the subspecies ranged northward into west-central Arizona, likely to the vicinity of present-day Interstate 10 and certainly no farther north than the Bill Williams River" (USFWS 2016 Recovery Plan, last paragraph on page 6). This would place the edge of their range nearly 45 miles north of the project at the closest point.	The Department requests this section be revised to accurately reflect the historic range of Sonoran pronghorn.	
3-24	3.3.3.2	T&E spp	Comments made above for general wildlife also apply to this section. Additionally, Alternative C states that the CAP canal and I-10 limit movement of Sonoran pronghorn. Although this is true, it is important to note that wildlife crossing structures occur on both I-10 and the CAP canal, so these are not impermeable barriers. This is an important consideration when analyzing potential impacts from the alternatives.	The Department requests this language be revised in this section and throughout the document (e.g., for BLM sensitive species) to identify that crossing structures have been implemented for I-10 and the CAP canal to facilitate wildlife movement.	
3-24	3.3.3.2	Monarch -- cumulative impacts	This section acknowledges that up to 38,213 acres of potential habitat for monarch butterflies within a 10-mile radius of the project would be directly impacted. However, it is stated that the monarch is a habitat generalist that uses any type of habitat that includes nectar producing plants and milkweed. Many of the projects would involve removing all vegetation as is the nature of solar development, and therefore any potential usable habitat. This would result in direct habitat loss for the species.	The Department requests this section be revised.	
3-24	3.3.3.2	T&E spp -- cumulative impacts	This section does not provide a comparison between the different alternatives' cumulative effects.	The Department requests that this section be updated to provide a comparison of potential cumulative effects from Alternatives A, B, and C.	

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3-28	3.3.4.2	BLM sensitive species -- impacts	This section does not adequately analyze potential impacts to BLM sensitive species, nor does it provide suitable comparison between the alternatives. Potential impacts on dispersal of Sonoran Desert tortoise are significantly lessened with the Wash Avoidance Alternative vs the Proposed action. While the CAP canal and I-10 limit movement through the area, they are not impermeable and avoiding the wash would allow for greater access through the project site to crossing points.	The Department requests this section be revised.	
3-32	3.3.5.2	Birds -- impacts	The impact assessment needs more detailed analysis of how this project could influence avian species, as well as analysis of the difference in potential effects between the three alternatives.	The Department requests the impacts, cumulative impacts, and irreversible and irretrievable effects sections be revised.	
B-1 - B-2	Table B-1	Recreation	"Hunting within the project area would not be allowed; however, the 3,495 acres of the Project represents an insignificant area compared to 1,189,857 acres of surrounding BLM lands that are within the Yuma field office jurisdiction and will continue to provide hunting opportunities. Therefore, the Project would have no impact."	The Department disagrees with the determination that the project would have no impact. The project will not only remove thousands of acres of habitat from those available for recreation within the project area, it will limit recreational activities within 1/4 mile of the project as well. Also, the wash that runs through the middle of the project is the most prominent feature of the surrounding area and likely to contain the best habitat in the area to support wildlife-related recreational activities such as hunting. The Department requests that this statement be revised and that recreation be analyzed in greater detail.	
B-1 - B-2	Table B-1	Recreation	It is unclear how the area (entire Yuma FO vs. a smaller footprint more proximal to the project)) for the scope of the potential impacts on recreational opportunity was determined. The Department would like clarification on the methodology used by the BLM to determine impacts to outdoor recreation.	The Department requests clarification and revision of this section and conclusions. The Department also requests that cumulative impacts from past, present, and reasonably foreseeable future actions on recreation within the 10-mile radius of the project be included in the detailed analysis.	
B-1 - B-2	Table B-1	Recreation	"Which, if any, existing recreation opportunities within or around the project site would the project temporarily or permanently conflict with or preclude?"	This question is not completely or thoroughly answered in the rationale for eliminating recreation from further analysis. Further, the rationale does not describe recreation opportunities <i>within</i> the project area, suggesting that recreation either is not allowed or does not take place within the project boundaries. The Department requests clarification of this section to accurately reflect recreational opportunities within and outside of the project area.	