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Working to protect and restore Western Watersheds

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By Email

California Energy Commission
Dockets Office, MS-4
Docket No. 09-RENEW EO-01
1516 Ninth Street
Sacramento, CA 95814-5512

- Web site: <http://drecp.org/>
- Email: docket@energy.ca.gov

Re: Draft Desert Renewable Energy Conservation Plan and Draft Environmental Impact Statement/Environmental Impact Report, California

Dear Agency Planners:

On behalf of the staff and members of Western Watersheds Project, please accept the following comments on the Draft Desert Renewable Energy Conservation Plan and Draft Environmental Impact Statement/Environmental Impact Report, California (“DRECP”).

Western Watersheds Project works to protect and conserve the public lands, wildlife and natural resources of the American West through education, scientific study, public policy initiatives, and litigation. Western Watersheds Project has over 1,600 members nationwide with offices in Arizona, California, Idaho, Montana, Utah, and Wyoming. Western Watersheds Project, as an organization and on behalf of its members, is concerned with and active in seeking to protect and improve wildlife habitats, riparian areas, wilderness character, water quality, cultural resources, and other sensitive resources and ecological values. Because the DRECP will permanently impact many of these interests we have repeatedly engaged in public comment on the DRECP process.

Western Watersheds Project recognizes that global climate change poses new challenges to the Nation’s already overstressed public lands. However, while climate change threatens biodiversity and entire fragile ecosystems, our response to climate change also threatens our public lands and their wildlife. Accordingly, WWP supports responsible development of renewable energy projects that focuses energy developments on private, severely altered lands that are located close to points of use. This approach minimizes new disturbance and further fragmentation of desert ecosystems. The agencies can best serve the California public by

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ensuring that public lands and their resources are protected and preserved to the fullest extent possible.

The fundamental interagency goal of the DRECP is to provide a streamlined process for the development of utility-scale renewable energy generation and transmission consistent with federal and state renewable energy targets and policies, while simultaneously providing for the long-term conservation and management of Covered Species and natural communities as well as other physical, cultural, scenic and social resources within the Plan Area with durable and reliable regulatory assurances. Unfortunately, the draft is obtuse, confusing, riddled with errors, and lacks vital pieces of information. It falls well short of its goal of assuring long-term conservation of important desert resources.

The Draft Planning Area includes approximately 22.5 million acres of Federal and non-Federal land in the Mojave and Colorado/Sonoran Desert regions of southern California, including portions of seven counties (Imperial, Inyo, Kern, Los Angeles, Riverside, San Bernardino, and San Diego). The Draft DRECP comprises three elements: the BLM's proposed Land Use Plan Amendments to the CDCA Plan, Bishop RMP, and Caliente/Bakersfield RMP; the FWS's proposed Habitat Conservation Plan (General Conservation Plan) in accordance with Section 10 of the ESA; and the CDFW's proposed Natural Community Conservation Plan in accordance with the California Natural Community Conservation Planning Act of 1991. The proposed Natural Community Conservation Plan would cover both Federal (to the extent permitted by law) and non-Federal lands.

Alternatives:

In our scoping comments, we proposed that the following actions be included in all of the alternatives analyzed in the EIS/EIR:

- (a) Designate the BLM's existing Mohave Ground Squirrel Conservation Area as an Area of Critical Environmental Concern.
- (b) Designate all habitat linkage corridors identified by the USFWS that provide connectivity between designated desert tortoise conservation areas as ACEC.
- (c) Amend the California Desert Conservation Area (CDCA) Plan, Bishop Resource Management Plan (RMP), Caliente/Bakersfield RMP, and Eastern San Diego County RMP to allow for voluntary relinquishment of livestock grazing leases to (a) resolve resource conflicts, and (b) provide mitigation opportunities to offset the impacts of renewable energy development.

We also proposed the following alternatives:

- (a) Siting projects only on Public lands that are not habitat for listed species such as desert tortoise.
- (b) A private lands only alternative under which energy projects are focused on private lands only, with the public lands dedicated to providing resiliency for special status species.

(c) Distributed energy alternatives such as using “roof top” solar to avoid impacts to all sensitive resources in the region.

Full analysis of **all of these** alternatives would have helped provide a baseline for identifying and fully minimizing resource conflicts, facilitate compliance with the BLM’s FLPMA requirement to prevent the unnecessary and undue degradation of public lands and its resources, and would help provide a clear basis for making an informed decision. This is precisely why CEQA and NEPA require consideration of alternatives in the first place.

Regretfully, the DRECP has not fully considered a Private and Previously Disturbed Lands Alternative. The DRECP at II.VI claims that it would not fully comply with BLM’s purpose and need for agency action. But this is an arbitrary decision. Several of the considered alternatives do not comply with the BLM’s purpose and need for agency action either because they would cause undue degradation to public lands and resources such as the outrageous proposals that would site energy developments in the Desert Tortoise Research Natural Area.

Likewise, the failure to analyze any distributed energy alternatives in the DRECP makes this flawed analysis. Consideration of one or more any distributed energy alternatives would have helped clarify the effectiveness of an approach that has wide public support and would provide a vital and useful yardstick with which to compare the environmental effects of the action alternatives. Absent this alternative it is impossible to determine the beneficial or negative impacts of the action alternatives or the no action alternative.

The DRECP’s analysis of a limited number of action alternatives none of which maximizes conservation of public resources makes this a grossly inadequate range of alternatives under both NEPA and CEQA. Western Watersheds Project urges the agencies to backtrack and to consider both private land and distributed generation alternatives. Western Watersheds Project has also signed on to the January 31, 2015 letter “Request for a new Desert Renewable Energy Conservation Plan Alternative” signed by multiple organizations and individuals and urges the agencies to fully consider that alternative.

The EIR/EIS Lacks Clarity and the Preferred Alternative is Unclear:

Environmental impact statements “shall be written in plain language” and “shall be concise, clear, and to the point, and shall be supported by evidence that agencies have made the necessary environmental analyses. 40 C.F.R. §1502.1 & §1502.8. The fundamental interagency goal of the DRECP is to provide a streamlined process for the development of utility-scale renewable energy generation and transmission consistent with federal and state renewable energy targets and policies, while simultaneously providing for the long-term conservation and management of Covered Species and natural communities as well as other physical, cultural, scenic and social resources within the Plan Area with durable and reliable regulatory assurances. Draft DRECP at I.1-1. Unfortunately, the draft DRECP is obtuse, confusing, riddled with errors, and lacks vital pieces of information. It falls well short of its goal of assuring long-term conservation of important desert resources. It fails to describe the current conservation situation and lacks basic, straightforward pieces of information such as a list and description of the existing and proposed Areas of Critical Environmental Concern (“ACEC”) for either the “no

action” or any of the action alternatives. There are many mapping errors (such as the designation of parts of Red Rock Canyon State Park as BLM ACEC). The EIR/EIS is so jargon-ridden as to be incomprehensible in places, with layers of overlapping designations which the Draft DRECP rather benignly characterizes as “envelops” but which simply sow confusion. The outcome is such that the preferred alternative and the other action alternatives are woefully unclear.

The entire DRECP should be rewritten, condensed and the proposed actions for each alternative should be clearly described so that the reader can understand what is really being proposed in each alternative, why it is being proposed, and what the impacts will be.

BLM Proposed Land Use Plan Amendments

According to the Draft DRECP, the BLM is proposing Land Use Plan Amendments to the CDCA Plan, the Bishop RMP, and Caliente/Bakersfield RMP for the approximately 10 million acres of BLM-managed public lands within the Draft DRECP Planning Area. The Land Use Plan Amendments would designate approximately 400,000 acres of Development Focus Areas for solar, wind, and geothermal development on public lands; 3.5 million acres of National Conservation Lands within the CDCA in accordance with the Omnibus and 2 million acres of existing, modified, and new Areas of Critical Environmental Concern and wildlife allocations. The BLM Draft DRECP Land Use Plan Amendments would also designate 2.5 million acres of existing, modified, and new Special Recreation Management Areas. The Draft DRECP Land Use Plan Amendments also include Conservation and Management Actions for the management of these designations.

Unfortunately, the Draft DRECP fails to describe the current conservation situation and lacks basic, straightforward pieces of information such as a list including the size and basic description of the existing and proposed Areas of Critical Environmental Concern (“ACEC”) for neither the “no action” nor any of the action alternatives. Instead the Draft DRECP presents a confusing scenario in which it pretends that existing NCLS lands within the planning such as the designated wildernesses are not part of the NCLS system at present. By “designating” these areas and including the existing and proposed ACECs the Draft DRECP seems to be buttressing its claim that it would increase the area of public land conserved. But this is nonsense. Congress has designated many Wilderness Areas within the CDCA and these are clearly of limits to development. The Draft DRECP seems to be reshuffling the cards of a hand that has already been dealt and then pretending it’s a new (conservation) deal. Certainly, the proposed ACEC designations for habitats that provide some connectivity between desert tortoise conservation areas are a welcome addition but the failure to describe these areas and their management leaves too much uncertainty. The proposal to designate parts of existing ACEC areas as “Extensive Recreation Management Areas” - particularly parts of the Ivanpah, Chemehuevi and Chuckwalla DWMAs – completely undermines the conservation value of these areas. We fully expect that the USFWS will issue a jeopardy determination solely because of the proposed Extensive Recreation Management Areas that are within designated critical habitat units and areas that have been identified as providing connectivity.

The failure to provide an adequate baseline that describes current conditions is a fatal flaw that ensures that none of the DRECP alternatives can be adequately analyzed under NEPA

or CEQA. Basic information on all the existing conservation areas (Wilderness, WSAs, ACEC, and Habitat Conservation Areas etc.) must be provided for the “no action” alternative, and the same basic information provided for any additional proposed conservation areas.

In this vein, the agencies should also make the same GIS data layers that were provided for the action alternatives available for the No Action Alternative. The revised Draft DRECP should explain why this was omitted.

Under the Preferred Alternative, renewable energy projects may be sited in ACECs. This completely undermines both the conservation value of the ACECs and the purpose of the DRECP goal of providing for the long-term conservation and management of Covered Species and natural communities.

NCS Lands

According to the Draft DRECP the Land Use Plan Amendments would designate “3.5 million acres of National Conservation Lands within the CDCA in accordance with the Omnibus and 2 million acres of existing, modified, and new Areas of Critical Environmental Concern and wildlife allocations.” As we discussed above it is unclear if this has either any conservation value or is even doable since many of the lands involved are already components of the NCLS.

Unfortunately, in part because the description of the “no action” alternative is so deficient it is difficult - if not impossible - for the reader to determine the current baseline conditions and thus appreciate if there are any added conservation values that can be attributed to the preferred alternative at all. For example, “Development in National Conservation Lands would be limited to 1% of total authorized disturbance, or to the level allowed by collocated ACEC/wildlife allocations, whichever is more restrictive.” IV.14-22. But the National Conservation Lands include designated wilderness, wilderness areas and other congressionally designated where no development is allowed. So, the so-called “1% of total authorized disturbance” will actually be applied to a small subset of the so called National Conservation Lands. We are concerned that this will in effect undermine the conservation value of any new proposed ACECs and will differentially impact listed and sensitive species habitats particularly desert tortoise and Mohave ground squirrel.

USFWS Proposed General Conservation Plan

The USFWS is proposing to issue permits for incidental take of covered species under a programmatic general conservation plan (GCP). Under the Draft DRECP, “Appropriate conservation lands to mitigate the effects of take would be acquired from willing sellers within an area of approximately 2.7 million acres of non-Federal lands within the Draft DRECP reserve design.” But the “reserve design” does not include large areas of habitat that the USFWS has determined are critical for the recovery of desert tortoise. For example, it excludes the large area of habitat in the Chuckwalla Critical Habitat Unit between the western boundary of the BLM’s existing Chuckwalla DWMA and the Mecca Hills. Draft DRECP Figure II.3-1. The DRECP describes some of this area as already being protected by the BLM (such as the Orocopia Mountains Wilderness). But there is a large amount of private land in Shavers Valley that

provides habitat and connectivity but is at high risk of development. How can a USFWS GCP not include this designated critical habitat as a priority for acquisition? If this area has already been written off by the agencies then this should be noted in the DRECP plan so it can be analyzed as part of the cumulative effects analysis.

Adequacy of Proposed Mitigation and Caps on Ground Disturbance

Under current management, take of state-listed species on private lands is determined on a case-by-case basis by the CDFW. Mitigation is assessed based on the site-specific impacts of a development. For example, mitigation requirements to offset impacts to Mohave ground squirrel through habitat acquisition may be as high as 7:1. The proposed 2:1 mitigation ratio is not justified in the Draft DRECP and is simply too low. Nor will this blanket 2:1 ratio assure that the most sensitive habitats are avoided. A ratio of at least 5:1 is needed to ensure that the acquired compensation lands in the reserve areas can be improved to offset the overall habitat loss.

The Federal land Policy and Management Act (“FLPMA”) mandates the BLM to prevent unnecessary or undue degradation of the lands it manages. Adding the impact of the loss of hundreds of thousands of acres of habitat to solar energy development on top of other consumptive impacts such as livestock grazing and off-road vehicle use to which the habitat of many animals and plants is already subject, is both unsustainable and inappropriate. In order to mitigate for any impacts of power plant developments on public lands, the BLM must seek to balance these impacts. Accordingly, the multiple impacts of all other consumptive uses authorized by any given land use plan will need to be reduced to the point at which there is a net decrease in cumulative impacts to remaining sensitive and listed species habitat to compensate for the habitat loss. Mechanisms to achieve this could include eliminating conflicting uses such as livestock grazing from the California Desert Conservation, Bishop, Caliente/Bakersfield, and Eastern San Diego County Resource Planning Areas, and establishing Areas of Critical Environmental Concern (“ACEC”).

BLM is obligated under FLPMA to “minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved.” 43 U.S.C. §1732(d)(2)(a). Other laws, including the Endangered Species Act, also entail the need for mitigations to minimize impacts. BLM is required to consider measures to mitigate potential environmental consequences in its NEPA analysis. 40 C.F.R. § 1502.16. The NEPA implementing regulations at 40 C.F.R. §1508.20 define "Mitigation" to include:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by replacing or providing substitute resources or environments.

The scale of the degradation and the potential massive loss of public resources under the DRECP will make development of appropriate mitigation measures extremely costly and difficult. All of the mitigations defined in §1508.20 are applicable to renewable energy projects.

In order to determine the extent of potential impacts from implementation of the DRECP an adequate description of the current baseline is essential. This baseline information should include a summary table showing the cumulative ground disturbance within the desert tortoise DWMAs and within the Mohave Ground Squirrel Habitat Conservation Area that has occurred since their inception. How much of the existing 1% cap on new ground disturbance has been used up since the West Mojave and NECO plan amendments were approved? How much compensation land has been acquired to offset those new ground disturbances? It is unclear if the BLM has even been compiling the cumulative new ground disturbance in the Mohave Ground Squirrel Habitat Conservation Area but this clearly relevant to the DRECP. The 1% caps proposed in the preferred alternative should include that cumulative new ground disturbance as part of its baseline, i.e. the existing 1% caps should not be a reset back to 0 for the DRECP.

In order for mitigation measures to be successful in offsetting any impacts they must be both tangible and permanent. The priority mitigation tools should be acquisition of replacement habitat and measures that result in the permanent removal of threats such as grazing allotment retirement.

Facilitation of Off Highway Vehicle Use

For reasons which are not made clear in the Draft DRECP, the BLM is proposing a massive expansion of Off-Highway Vehicle use throughout the planning region. Based on the data presented in the EIS/EIR, the BLM is proposing to expand off-roading by nearly 2 million acres. We reproduce the data presented on page 40 of the Executive Summary but with the totals added that the Draft DRECP failed to include:

	Preferred Alt	Alt 1	Alt 2	Alt 3	Alt 4	No Action
Areas Managed for Recreation Emphasis						1,465,000
Existing Special Recreation Management Areas	193,000	193,000	193,000	193,000	193,000	193,000
Proposed Special Recreation Management Areas	2,531,000	2,537,000	2,463,000	2,531,000	2,489,000	
Proposed Extensive Recreation Management Areas	879,000					
Open Off-Highway Vehicle/Special Recreation Management Area	321,000	321,000	321,000	321,000	321,000	321,000
TOTAL ACRES	3,924,000	3,051,000	2,977,000	3,045,000	3,003,000	1,979,000

Given that off-road vehicles are significant threats to the same resources that will be impacted by the energy developments facilitated by the DRECP the EIR/EIS should be considering the cumulative effect of the loss of the total estimated footprint impacts of energy developments (including all renewable energy technologies and transmission) of 177,000 acres plus the additional 1,945,000 acres that will managed for motorized recreation. This amounts to a loss of 2,122,000 acres for the preferred alternative compared to 158,000 acres for no action.

The massive increase of nearly 2 million acres available for motorized vehicles will lead to significant increases in greenhouse gas emissions and a significant loss of carbon sequestration on public lands. This is completely inappropriate in a plan that is supposed to be about facilitating renewable energy production in the face of anthropogenic climate change “while simultaneously providing for the long-term conservation and management of Covered Species and natural communities as well as other physical, cultural, scenic and social resources within the Plan Area with durable and reliable regulatory assurances.” Draft DRECP at I.1-1.

DRECP Variance Lands

According to the Draft DRECP at IV.14-19 - IV.14-20, “DRECP Variance Lands represent the BLM Solar PEIS Variance Lands as screened for the DRECP and EIR/EIS based on BLM screening criteria. Covered Activities could be permitted for NCCP purposes only through an NCCP Plan amendment. However, development of renewable energy on Variance Lands would not require a BLM Land Use Plan Amendment so the environmental review process would be somewhat simpler than if the location were left undesignated. Development or Conservation Designation of the DRECP Variance Lands would not likely impact BLM land designations, classifications, allocations, or lands inventoried or managed for wilderness characteristics.” It is unclear if the DRECP is changing the variance procedure. The Draft DRECP should be revised to explain this.

DRECP Reserves

The Draft DRECP needs to include a frank evaluation of the likely acceptance of the proposed DRECP reserve areas with County and local governments. The California City area is a particular concern given that it already has extensive dispersed developments and extensive calls on ground water. Have the City and County officials really bought into this plan?

The proposed reserve area immediately south of the built area of California City lacks connectivity to the east. A corridor needs to be extended to link this reserve area with habitat to the east if this is to be of meaningful conservation value. This reserve area should also be extended to the south to include the known Barstow woolly sunflower, *Eriophyllum mohavense*, occurrences.

Biological Resources

Since the DRECP will facilitate the loss of some existing conservation lands the biological goals for threatened and endangered species in all reserve and conservation areas the plan must include species recovery goals for all covered species. “Maintain the population size”

as is proposed for the endangered Yuma Clapper Rail, *Rallus longirostris yumanensis*, and the California Black Rail, *Laterallus jamaicensis coturniculus* is simply inappropriate. As the DRECP planners are aware, existing solar structures have resulted in the take of Yuma Clapper Rail. This direct impact is likely to worsen not lessen under the DRECP Preferred Alternative.

All the Biological Goals should be specific and provide tangible benefits if they are to provide real guidance for the DRECP process and provide assurances that conservation will indeed be the outcome.

The table “Plan-Wide Impact Analysis for Covered Species Habitat – Preferred Alternative” (starting at page IV.7-236) does not include specific allocations made by the plan to Proposed Special Recreation Management Areas and Proposed Extensive Recreation Management Areas which cover millions of acres.

Special Status Species

The BLM must consider the direct, indirect, and cumulative effects on all of the many BLM special status species found on public lands within the DRECP. It must consider impacts to important ecological processes including hydrological and aeolian (wind) components. The proposed plan amendments must be consistent with the CDCA Plan’s biological goals. For example, this requires that the BLM consider, “The fragmenting affects of projects ... in the placement, design, and permitting of new projects.” [NECO Plan at 2-43]

Unfortunately, the Draft DRECP lacks discussion of many special status species that will be directly impacted by the proposed plan. These include the Loggerhead Shrike, *Lanius ludovicianus*, and Le Conte’s Thrasher, *Toxostoma lecontei*. The Desert Tortoise Research Natural Area and surrounding region provide important habitat for both of these species. These populations will be heavily impacted by the proposed adjacent Development Focus Area. This needs to be rectified and addressed in the revised Draft DRECP.

Agassiz’s Desert Tortoise

The DRECP will directly, indirectly and cumulatively impact Agassiz’s desert tortoise (*Gopherus agassizii*) (“desert tortoise”). According to Lovich and Ennen (2011)¹, the potential effects of the construction of solar energy facilities include the direct mortality of wildlife; environmental impacts of fugitive dust and dust suppressants; destruction and modification of habitat, including the impacts of roads; and off-site impacts related to construction material acquisition, processing, and transportation. The potential effects of the operation and maintenance of the facilities include habitat fragmentation and barriers to gene flow, increased noise, microclimate alteration, pollution, water consumption, and fire. Large scale alterations of

¹ Lovich, J. E. and Ennen, J. R. 2011. Wildlife Conservation and Solar Energy Development in the Desert Southwest, United States. *BioScience*, 61(12): 982-992.

desert habitat such as solar farms alter local albedo, elevate local thermal environments, and thus increase extinction risks for lizards and other species (Sinervo, 2012²).

The summary section on Agassiz's desert tortoise in III.7-127 to III.7-128 should be amended to recognize the ongoing contraction of the desert tortoise population in the West Mojave Recovery Unit. Results from the USFWS Range-wide Line Distance Samplings surveys show marked declines have occurred from 5.1 per km² in 2007 to 3.6 km² in 2012³. The only area within the West Mojave Recovery Unit where desert tortoise populations are known to be stable or increasing is at the Desert Tortoise Research Natural Area⁴. Unfortunately, the Draft DRECP is focusing energy development in and around the one conservation area where there is evidence of ongoing desert tortoise recovery. Thus, the documented population decline in the West Mojave Recovery Unit is a key "salient point" that should be emphasized - not downplayed - by the DRECP.

Shaffer *et al.* (2015)⁵ report that the under the preferred alternative although 3.7% of desert tortoise habitat would be developed this would result in an 18% reduction in gene flow over "no action". This implies that Goal DETO2 "Maintain functional linkages between Tortoise Conservation Areas to provide for long-term genetic exchange, demographic stability, and population viability within Tortoise Conservation Areas" will not be met by the preferred alternative. This is a significant impact that should trigger a jeopardy determination from the USFWS.

Step-Down Biological Objective DETO-B is also deeply flawed because it lacks certainty. It currently states:

Protect, maintain, and manage for the duration of the NCCP on BLM LUPA conservation designation lands and prioritize for conservation on non-BLM lands substantial representative areas of desert tortoise habitat in the following areas:

- Desert Tortoise Research Natural Area
- Fremont-Kramer Desert Wildlife Management Area and Critical Habitat Unit
- Ord-Rodman Desert Wildlife Management Area and Critical Habitat Unit
- Portions of the Superior-Cronese Desert Wildlife Management Area and Critical Habitat Unit
- Portions of the Chuckwalla Desert Wildlife Management Area and Critical Habitat Unit
- Portions of intact desert tortoise habitat in the Colorado Desert
- Fremont Kramer to Ord-Rodman Linkage
- Chemehuevi to Chuckwalla Linkage

² Sinervo, B. 2012. Climate Forced Lizard Extinctions Are Coupled To Dieback Events and Successional Change In Plants. Abstracts of the SCB North American Congress for Conservation Biology. Oakland, California. Page 203. Available online at: http://www.xcdtech.com/SCBNA/abstractbook/NACCB2012_Final_Abstracts_Book.pdf

³ Data available at: http://www.fws.gov/nevada/desert_tortoise/dtro/dtro_monitor.html

⁴ Berry, K. H., Shields, T., Yee, J. and Perry, W. 2015. The Fence Experiment at the Desert Tortoise Research Natural Area Interpretive Center: An Evaluation after 33 Years. Presentation to the Desert Tortoise Council Annual Symposium, February 20, 2015 (abstract attached).

⁵ Shaffer, H. B., McCartney-Melstad, E., Ralph, P., Bradburd, G., Tracy, R. and Sandmeier, F. Presentation to the Desert Tortoise Council Annual Symposium, February 20, 2015 (abstract attached).

- Portions of the Ord-Rodman to Joshua Tree Linkage

It should be revised to state:

Protect, maintain, and manage for the duration of the NCCP on BLM LUPA conservation designation lands and prioritize for conservation on non-BLM lands ~~substantial representative areas of~~ desert tortoise habitat in the following areas:

- Desert Tortoise Research Natural Area
- Fremont-Kramer Desert Wildlife Management Area and Critical Habitat Unit
- Ord-Rodman Desert Wildlife Management Area and Critical Habitat Unit
- ~~Portions of the~~ Superior-Cronese Desert Wildlife Management Area and Critical Habitat Unit
- ~~Portions of the~~ Chuckwalla Desert Wildlife Management Area and Critical Habitat Unit
- ~~Portions of~~ intact desert tortoise habitat in the Colorado Desert
- Fremont Kramer to Ord-Rodman Linkage
- Chemehuevi to Chuckwalla Linkage
- ~~Portions of the~~ Ord-Rodman to Joshua Tree Linkage

The Desert Tortoise Council has submitted extensive detailed comments on the DRECP and desert tortoise. We endorse the Desert Tortoise Council's comments and Western Watersheds Project hereby incorporates the Desert Tortoise Council's comments in their entirety into our comments as if fully recited herein.

Desert Cymopterus

Goal DECY1 for the Desert Cymopterus, *Cymopterus deserticola*, is: Maintain or increase the distribution, population size, or number of populations of desert cymopterus and contribute to its recovery in the Plan Area. Objective DECY1.1 is "Conserve and avoid known extant populations of desert cymopterus. The majority of the known desert cymopterus occurrences are located in wind deposited sand, generally near a large source of sand such as a dry lake bed. The largest populations are found east of Cuddeback Dry Lake and on or near Edwards Air Force Base."

In December 2014, Congress passed the National Defense Authorization Act of 2015, Pub. L. No. 113-291. Sec. 3068 of this act expanded the Naval Air Weapons Station, China Lake, into the Desert Cymopterus population east of Cuddeback Dry Lake. There are very few Desert Cymopterus populations outside the DOD facilities. Because the DRECP lacks any control over DOD lands, this goal needs to be strengthened to guarantee that all Desert Cymopterus populations and their habitats outside the DOD facilities will be fully protected from development.

Golden Eagle

The golden eagle, *Aquila chrysaetos*, is a fully protected species under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c) that will be impacted by the DRECP. Although it is a covered species, the Preferred Alternative provides no estimate of the take of

golden eagle. According to the footnote to Table IV.7-54 Plan-wide Estimated Total Take for Covered Avian and Bat Species - Preferred Alternative, “Take of golden eagle would be permitted on a project by project basis. Based on the 2013 analysis, no more than 15 golden eagles per year would be authorized for 2014 for any new activity within the Plan Area. Take limits for the DRECP area will be re-evaluated annually based on the amount of ongoing take and population estimates of eagles within the local-area population of eagles.” But because the Preferred Alternative locates Development Focus Areas in known golden eagle foraging habitat it will result in take. For example, the Desert Tortoise Research Natural Area has long been known as a golden eagle foraging area (including reports of eagles predated on young desert tortoises).

As the CDFW and other agencies are aware, concerns have been raised in the literature that DRECP golden eagle surveys have undercounted golden eagle populations⁶.

The revised Draft DRECP needs to be reworked to include all new data on golden eagle populations and to provide a rigid estimate of anticipated take from its Development Focus Areas and other activities directed by the plan. It needs to consider restricting certain technologies such as power tower technology and turbine technology in areas occupied and used by sensitive species of bats and birds.

Mohave Ground Squirrel

The DRECP will massive direct, indirect and cumulative impacts on the state-listed Mohave ground squirrel, *Xerospermophilus mohavensis*. The proposed Development Focus Areas around the Desert Tortoise Research Natural Area which provides important Mohave ground squirrel habitat are particularly problematic. The Desert Tortoise Research Natural Area and vicinity have long been an important target area for the acquisition of compensation lands by CDFW specifically to benefit Mohave ground squirrel. If adopted, the proposed Development Focus Areas around the Desert Tortoise Research Natural Area will compromise decades of conservation work by the CDFW.

The Draft DRECP initially omitted the existing Mohave Ground Squirrel Conservation Area and proposed ACECs from its maps and the accompanying narrative. Under the preferred alternative, the Mohave Ground Squirrel Conservation Area is largely designated as new ACECs except where it overlaps with other existing areas. The missing narrative describes management in these ACEC’s. It allows livestock grazing to continue. However, the list of species for special management excludes the extremely rare sanicle or Ripley’s cymopterus, *Cymopterus ripleyi* var. *saniculoides*. Most of the known occurrences of this plant are in the newly established ACEC on the Lacey-Cactus-McCloud Allotment. The California Native Plant Society lists livestock grazing as a threat to the plant.⁷ There is no cumulative effects analysis for livestock grazing on this extremely rare species. The DRECP cannot tier off the 2006 West Mojave Plan for the cumulative effects analysis on this plant since the only mention of Ripley’s cymopterus in

⁶ See: Quality of Data from Renewable Energy Golden Eagle Nest Surveys available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83923>.

⁷ <http://www.rareplants.cnps.org/detail/542.html>

that plan amendment was the listing of the plant's name on the list of dropped species. BLM West Mojave Plan 2006 Appendix Y.

The BLM recognizes that grazing impacts the Mohave ground squirrel and its habitat and has allowed for the relinquishment of grazing privileges on some allotments to benefit the Mohave ground squirrel and other species. Livestock grazing and the associated infrastructure and operations have many direct and indirect impacts on Mohave ground squirrels and their habitat. These effects include: loss of habitat due to construction and use of range developments, changes in habitat soil and vegetation, competition for food, trampling, trampling of burrows, increased risk for invasive species and fires, and presence of sheep dogs. Livestock impacts are most obvious around watering sites and other developments where shrubs are completely denuded, but livestock may make use of an entire allotment. Consequently, the action areas for livestock impacts tend to be very large with actual footprints indicated by the size of the grazing allotments themselves.

Livestock compete with Mohave ground squirrels for important forage items. For example, Leitner and Leitner (1998)⁸ documented dietary overlap for relatively uncommon forage plants between livestock and the Mohave ground squirrel. Leitner has identified winterfat and spiny hop-sage as important dietary components for Mohave ground squirrels. Winterfat foliage made up 24% of the cattle diet. In a wet year, sheep ate mainly forbs and grasses, while in a dry year winterfat constituted 50% of the sheep diet, even though this forage species was rare. A 1996 study conducted in Mohave ground squirrel habitat within the Cantil Common Allotment established that both winterfat and spiny hop-sage were preferred food plants for domestic sheep (Phillips *et al.*, 1996⁹).

Livestock contribute to the spread and establishment of invasive plants and weeds that pose a significant risk in desert habitats by both competing with important native plants, and by altering major ecological conditions such as altered fire regimes (see Brooks and Matchett, 2006¹⁰). These authors note, “non-native annual grasses are often not abundant except in disturbed areas at ... higher elevations” (page 161). In that same issue of the *Journal of Arid Environments* are two other publications relating to effects of livestock water sites on alien and native plants (Brooks *et al.*, 2006¹¹) and environmental correlates of alien annual plants in the Mojave Desert (Brooks and Berry, 2006¹²). Brooks *et al.*, 2006 provides data on “piosphere” effects related to livestock watering sites. Livestock act as vectors for invasive weed seed spread and facilitate the establishment of invasive species especially in higher use areas. Impacts to biological soil crusts facilitate growth of less nutritious invasive plants such as *Schismus* species.

⁸ Leitner, P. and Leitner, B. M. 1998. Coso grazing enclosure monitoring study, Mohave ground squirrel study Coso Known Geothermal Resource Area, Major Findings 1988-1996. Final Report.

⁹ Phillips, R. L., McDougald, N. K. and Sullins, J. 1996. Plant preference of sheep grazing in the Mojave Desert. *Rangelands*. 18(4): 141-144.

¹⁰ Brooks, M. L. and Matchett, J.R. 2006. Spatial and temporal patterns of wildfires in the Mojave Desert, 1980-2004. *Journal of Arid Environments* 67: 148-164.

¹¹ Brooks, M. L., Matchett, J.R. and Berry, K.H. 2006. Effects of livestock watering sites on alien and native plants in the Mojave Desert, USA. *Journal of Arid Environments* 67: 125-147.

¹² Brooks, M. L., and Berry, K. H. 2006. Dominance and environmental correlates of alien annual plants in the Mojave Desert, USA. *Journal of Arid Environments*. 67: 100-124.

Maintaining and promoting intact biological soil crusts is one of the few options available to minimize invasive species spread.

Grazing livestock under desert conditions requires an extensive infrastructure to support it including developed waters (springs, wells, water tanks, troughs, and water haul sites), fencing, bedding areas, and corrals/holding pens/chutes etc. Maintaining these facilities often requires use of motorized vehicles in sensitive habitat and generates vehicle tracks even in designated Wilderness Areas. The presence of these vehicle tracks facilitates both intentional and unintentional unauthorized motorized vehicle use. Some grazing facilities such as water tanks are highly visible and provide an “attractive nuisance” effect. Livestock fences through even remote habitat areas often have parallel “routes” running alongside, and frequently routes appear on both sides of the fence. Dirt roads are often associated with elevated levels of livestock grazing and other human-related activities (see Brooks and Berry 2006 at 117 citing FWS 1994), and minimizing the density of dirt roads may minimize dominance of alien annuals alien species richness and alien biomass (*Ibid.* at 119). Removing grazing and associated infrastructure thus facilitates management of threats posed by unauthorized vehicle use.

Coyotes prey on Mohave ground squirrels (Best, 1995¹³) and there is some evidence that ravens predate on Mohave ground squirrels (see Harris and Leitner, 2005¹⁴). There is evidence that ravens show a preference for stock tanks rather than natural springs as a water source (Knight *et al.*, 1998¹⁵). Ravens are visual foragers and use fence posts as perch sites to increase their visual fields. Livestock presence may be beneficial to ravens in other ways too, providing carcasses and disturbances that facilitate raven presence and foraging. Coyote populations also benefit from water developments. Removal of livestock and grazing infrastructure thus benefits the Mohave ground squirrel by reducing opportunities for “subsidized” predators.

Current mitigations for projects on private lands are handled on a case-by-case basis by the CDFW. The DRECP should be revised to include a table showing prior project compensation ratios so that a baseline for assessing the adequacy of the Preferred Alternative’s proposed 2:1 mitigation ratio can be set.

The conservation measures for existing and proposed conservation areas should be enhanced to compensate for the loss of habitat the DRECP will unleash. These measures should include removal of livestock, fencing where appropriate, invasive species control, small scale restoration projects, acquisition of water rights, and route closures. All the affected Resource Management Plans should be amended to allow for conservation buyout and voluntary relinquishment of grazing permits to facilitate conservation and habitat enhancement.

Burrowing Owl, Migratory Birds, and Bats

¹³ Best, T. L. 1995. *Spermophilus mohavensis*. Mammalian Species, 509: 1-7.

¹⁴ Harris, J. H. and Leitner, P. 2005. Long-distance movements of juvenile Mohave ground squirrels, *Spermophilus mohavensis*. The Southwestern Naturalist, 50(2): 188-196.

¹⁵ Knight, R. L, Camp, R. J. and Knight, H. A. L. 1998. Ravens, Cowbirds, and Starlings at Springs and Stock Tanks, Mojave National Preserve, California. Great Basin Naturalist. 58(4): 393-395.

The DRECP's Preferred Alternative is expected to result in a massive take of rare bats, migratory birds, burrowing owls, and other avian species from development due to loss of forage, impacts to corridors and flyways, and impacts from solar thermal power tower technologies, impacts from wind turbine operation. Draft DRECP IV.7-277. The listed estimated take includes 60 endangered Yuma Clapper Rails. In 2008, the total US-wide population of Yuma Clapper Rail was estimated at 641 and the California population at 592¹⁶. Thus the estimated take amounts to 10% of the population. It is unclear how either the state or federal agencies could authorize this level of incidental take.

The Draft DRECP should be revised to include viability determinations for each of the covered species in the planning area and requisite measures to minimize this take to the maximum extent practicable.

New Science

In addition to the scientific literature cited above, the DRECP planners should consider the following new science in revising the Draft DRECP (copies attached):

Aiello, C. M., Nussear, K. E., Walde, A. D., Esque, T. C., Emblidge, P. G., Sah, P., Bansal, S. and Hudson, P. J. 2014. Disease dynamics during wildlife translocations: disruptions to the host population and potential consequences for transmission in desert tortoise contact networks. *Animal Conservation*, 17(S1): 27-39.

Berry, K. H., Yee, J. L., Coble, A. A., Perry, W. M. and Shields, T. A. 2013. Multiple Factors Affect a Population of Agassiz's Desert Tortoise (*Gopherus agassizii*) in the Northwestern Mojave Desert. *Herpetological Monographs*, 27(1): 87-109.

Berry, K. H., Lyren, L. M., Yee, J. L. and Bailey, T. Y. 2014. Protection Benefits Desert Tortoise (*Gopherus agassizii*) Abundance: The Influence of Three Management Strategies on a Threatened Species. *Herpetological Monographs*, 28(1): 66-92.

Bowen, L., Miles, A. K., Drake, K. K., Waters, S. C., Esque, T. C. and Nussear, K. E. 2015. Integrating Gene Transcription-Based Biomarkers to Understand Desert Tortoise and Ecosystem Health. *EcoHealth*, 1-12. DOI: 10.1007/s10393-014-0998-8

Germano, J. M., Field, K. J., Griffiths, R. A., Clulow, S., Foster, J., Harding, G. and Swaisgood, R. R. 2015. Mitigation-driven translocations: are we moving wildlife in the right direction? *Frontiers in Ecology and the Environment*.

Hinderle, D., Lewison, R. L., Walde, A. D., Deutschman, D. and Boarman, W. I. 2015. The effects of homing and movement behaviors on translocation: Desert tortoises in the western Mojave Desert. *The Journal of Wildlife Management*, 79(1): 137-147. DOI: 10.1002/jwmg.823

¹⁶ U.S. Fish and Wildlife Service. 2009. Yuma Clapper Rail (*Rallus longirostris yumanensis*) Recovery Plan. Draft First Revision. U.S. Fish and Wildlife Service, Southwest Region, Albuquerque, New Mexico. Page 62.

Nafus, M. G., Tuberville, T. D., Buhlmann, K. A. and Todd, B. D. 2013. Relative abundance and demographic structure of Agassiz's desert tortoise (*Gopherus agassizii*) along roads of varying size and traffic volume. *Biological Conservation*, 162: 100-106.

Summary

The Draft Desert Renewable Energy Conservation Plan suffers from serious and fatal flaws. The Draft DRECP does not avoid impacts to listed species, does not direct renewable energy development to places of low conflict, will imperil many sensitive plants and animals, and will further degrade rather than conserve important regions of the California Desert. It fails to consider reasonable alternative approaches to satisfy renewable energy needs. The Draft needs a thorough revision that places species conservation at its heart and that takes a serious approach to conserving the resiliency of desert resources in the face of climate change while facilitating responsible renewable energy development.

Western Watersheds Project thanks you for this opportunity to assist the participating agencies by providing comments on the Draft DRECP. Please keep Western Watersheds Project informed of all further substantive stages in this planning process. If we can be of any assistance or provide more information please feel free to contact me by telephone at (818) 345-0425 or by e-mail at <mjconnor@westernwatersheds.org>.

Yours sincerely,

A handwritten signature in black ink that reads "Michael J. Connor". The signature is written in a cursive style and is underlined with a single horizontal line.

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ATTACHMENT: New literature cited. WWPEXhibits.pdf