June 14, 2018

Bureau of Land Management
California Desert District
Attn: WMRNP Plan Amendment
22835 Calle San Juan de Los Lagos
Moreno Valley, CA 92553 Submitted via email to: blm_ca_wemo_project@blm.gov

Comments on the Draft Supplemental Environmental Impact Statement for the West Mojave Route Network Project (DOI-BLM-CA-D080-2018-0008-EIS)

Dear Mr. Toedtli and the West Mojave Route Network Project team,

Thank you very much for the opportunity to provide comments on the Draft Environmental Impact Statement (DSEIS) for the West Mojave Route Network Project (WMRNP). The West Mojave Planning Area (WEMO) covers more than 9 million acres of land in California's Mojave Desert. Within this area the Bureau of Land Management (BLM) administers more than 3.1 million acres of land, which is managed for a multitude of uses. These uses range from extraction of resources (e.g. mining) to recreation to the preservation of biodiversity. BLM must manage these lands to accommodate a variety of interests.

The current inventory of routes in the DSEIS indicates that more than 16,000 miles of roads and linear disturbances exist in the WEMO planning area. The WMRNP proposes to designate between 5,231 and 10,864 miles of roads primarily for vehicular use, depending on the selected alternative, while closing the remainder of existing routes. The WMRNP does not propose to create any new routes. However, the creation of routes in the WEMO planning area is an ongoing process, not by BLM but by off highway vehicle (OHV) users themselves. Indeed, potentially thousands of miles of routes inventoried as part of the WMRNP have not been planned or created by BLM, and have been created illegally by OHV users. BLM is legally mandated to manage for vehicular travel by designating existing routes as either open or closed, and by preventing the creation of new roads.

The Western Mojave Desert has been identified by scientists as an important place for the conservation of biodiversity (see Pavlik 2008[1]). The large number of rare and/or endangered species addressed in the DSEIS is proof that the planning area provides irreplaceable habitats for globally important biodiversity and ecosystem services. The Mojave Desert is one of Earth's last living landscapes, in which biological and ecological processes remain intact. Given the reality of global climate change, habitat fragmentation, and degradation, these landscapes should be managed primarily for the conservation of biodiversity.

[1] https://www.ucpress.edu/book/9780520251458/the-california-deserts

The California Native Plant Society ("CNPS") is a non-profit environmental organization with nearly 10,000 members in 35 local chapters. CNPS' mission is to protect California's native plant heritage and preserve it for future generations through the application of science, research, education, and conservation. CNPS works closely with decision-makers, scientists, and local planners to advocate for well-informed and environmentally friendly policies, regulations, and land management practices. In line with our mission we provide the following comments on the DSEIS for the WMRNP.

1. We recommend that BLM adopts Alternative 2 in the DSEIS instead of the preferred Alternative 4

Alternative 2 is the superior alternative. Alternative 4 features 6,313 miles of designated routes, more than 1,000 miles more than are proposed in Alternative 2.

We support the adoption of Alternative 2 for the reasons that it contains the following:

- The lowest mileage of designated motorized routes, 5,231 miles, and the highest number of closed routes, resulting in the closure of 10,781 miles of existing routes
- The largest reduction of fugitive dust emissions compared to other alternatives
- The lowest number or routes adjacent to washes, springs, riparian habitats, and areas prone to erosion
- The lowest direct, indirect, and cumulative impacts to vegetation
- The lowest level of impacts caused by grazing including discontinued grazing on three active allotments located in sensitive habitats
- The lowest direct, indirect, and cumulative impacts to wildlife and plant resources
- The lowest amount of mileage in conflict with cultural resources
- The lowest level of adverse effects to visual resources
- The lowest impacts to environmentally and culturally important lands designated as California Desert National Conservation Lands (CDNCLs), Areas of Critical Environmental Concern (ACECs), Lands with Wilderness Characteristics (LWCs), National Monuments (NMs), Unusual Plant Assemblages (UPAs), and Wilderness Areas (WAs)
- The lowest impact on paleontological resources

2. We recommend that the BLM conducts route-specific analyses informed by on-the-ground surveys of impacts on sensitive biological resources for each proposed route in each alternative

As currently drafted the DSEIS does not adequately address the environmental impacts associated with each route. This is true for all of the proposed alternatives. According to the DSEIS (1-1), the WMRNP "has been determined to be a major federal action that requires preparation of an EIS pursuant to the National Environmental Policy Act (NEPA)." As currently presented the DSEIS fails to adequately disclose the impacts associated with the designation of routes in WEMO. We recognize that fully disclosing the specific impacts of each proposed route would require a significant dedication of time and resources. That said the lack of specific information in the DSEIS makes it impossible to determine the impacts that route designation

will have on sensitive biological resources. BLM has had more than a decade to rectify inadequacies in the 2005 WEMO FEIS, and has failed to do so.

Instead of providing information on how each special status species will be affected by each of the proposed alternatives, the DSEIS includes very general information on the biology and threats to sensitive biological resources. For example, *Astragalus albens* (Big Bear Valley woolypod, California Rare Plant Rank [CRPR] 1B), is a BLM Sensitive species that was not evaluated in the 2005 FEIS. Instead of actually assessing the impacts of proposed routes on this rare species, the DSEIS (3.4-32) resorts to a vague reporting of the acreage of this species that occurs within the WEMO planning area and an assessment of threats based on a review of the CNPS Inventory of Rare, Threatened, and Endangered Plants (CNPS Inventory[2]). One of the listed threats to this species is "vehicles." This alone should have triggered a thorough analysis of where proposed routes intersect with known populations of this species. Even more appropriate would be an on-the-ground analysis that surveys for *Astragalus albens* along proposed routes and evaluates the impacts of these routes on this species. This example is emblematic of the gross inadequacies of the disclosure of impacts to sensitive biological resources in the DSEIS. We recommend the following measures to remedy these shortcomings:

1. BLM should conduct surveys for all biological resources including but not limited to rare plants, rare animals, and vegetation communities along all proposed routes in the WMRNP
2. The results of these surveys should be reported in detail and provided for public comment
3. The direct, indirect, and cumulative impacts of proposed routes should be detailed and provided for public comment
4. The information from surveys and the analysis of impacts should inform the range of alternatives presented to the public

The current DSEIS remains insufficient until the above four actions are completed.

3. Future survey efforts and the analysis of potential impacts on sensitive botanical resources might be assisted by the following analysis conducted by CNPS. The results of the analysis are provided in Appendix 1

To begin to address measures 1-4 listed above in Section 2, we conducted our own analysis as part of our DSEIS review. This analysis used the following GIS data layers:

- California Natural Diversity Database[3] (CNDDB) polygon dataset from April 2018
- Point data for California Rare Plant Rank (CRPR) 4 taxa obtained from the Consortium of California Herbaria[4] and Calflora[5]
- Unusual Plant Assemblages polygons, points, and linear features identified in the California Desert Conservation Act (CDCA)
- Polygons for sensitive natural communities (aka vegetation types) ranked G1-G3 and/or S1-S3 by the California Department of Fish and Wildlife[6]

[2] http://www.rareplants.cnps.org/
[3] https://www.wildlife.ca.gov/data/cnddb/maps-and-data
[4] http://ucjeps.berkeley.edu/consortium/
[5] http://www.calflora.org/

- GIS layers of routes proposed in the DSEIS provided by BLM in April 2018

The analysis included the following steps all conducted using ArcMap 10.5.1:

1. We split the entire CDCA into a 1 square kilometer grid (1000 m by 1000 m) using the "Create Fishnet" tool
2. All of the above data layers were then added to the map
3. We created a weighting scheme to allow for the analysis of botanical resources in each grid cell according to the following table:

Category	Rank	Weight Used in Analysis
Rare Plants	CRPR[7] 1B, 1A	4
Rare Plants	CRPR 2B, 2A	3
Rare Plants	CRPR 3	2
Rare Plants	CRPR 4	1
Vegetation	CDFW[8] S1/G1	3
Vegetation	CDFW S2/G2	2
Vegetation	CDFW S3/G3	1
Unusual Plant Assemblages	n/a	2

The weighting scheme (above) gives the highest score to the resources with the highest values based on their rarity rank (e.g. plants ranked as CRPR 1A, 1B were weighted with the highest value of 4, while rare plants with a rank of CRPR 4 were given a weight of 1). Unusual Plant Assemblages were given a weight of 2. In some cases, the weight of some botanical resources (e.g. a limited number of rare plant element occurrences in CNDDB) with low mapping precision (e.g. they were mapped as 5-km radius circles due to imprecise location information) were adjusted by a factor of 0.5.

4. We used spatial joining to attribute the values associated with each botanical resource to each grid cell. For example, if, hypothetically two CRPR 1B plant occurrences, one S2 vegetation polygon, and one Unusual Plant Assemblage polygon were located within a grid cell, this grid cell would be attributed with the following values:

   2 X 4 (CRPR 1B) = 8
   1 X 2 (S2 Vegetation) = 2
   1 X 2 (UPA) = 2Botanical Resources Total = 12

   Based on the combination of these resource values the Botanical Resources Total would be 12.

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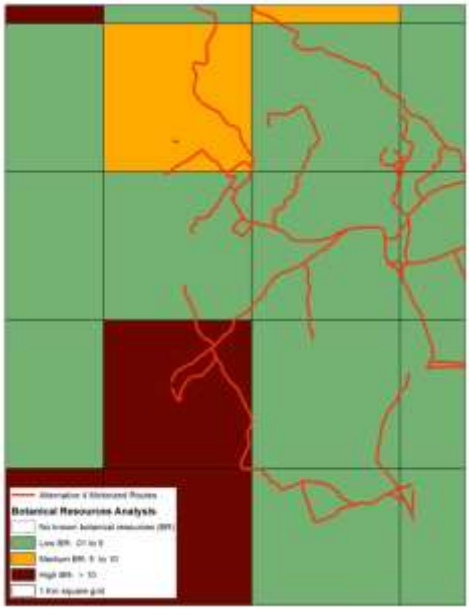
[6] https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities
[7] http://www.rareplants.cnps.org/
[8] https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities

5. The Botanical Resources Total (See Step 4) value and the individual values for each category (rare plants, vegetation, UPA) were attributed to each of the route segments from Alternative 4 occurring in each grid cell. For route segments that span more than one grid cell, the combined botanical resource values for the cells was averaged to avoid "double counting" these values.

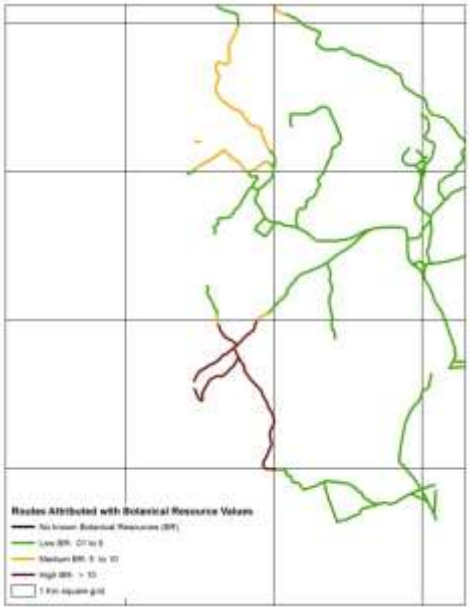
*Results of Analysis (see **Appendix 1**)*

- We visualized the botanical resources in the WEMO planning area spatially in 1 km square grid cells (see B below) and them with these values attributed to the routes (see C) that occur each grid cell (the figures below contains an example of the analysis/results)

A. Botanical resources in an example area within WEMO



B. Heat map of botanical resources within grid cells



C. Botanical resources attributed to routes in Alternative 4

D. Area used in this example denoted by a red star

- More than 46,000 route segments spanning more than 2,800 miles of routes designated for motorized vehicle travel in Alternative 4 occur in grid cells where sensitive botanical resources are present
- More than 4,200 route segments spanning 200 miles of routes designated for motorized vehicle travel occur in grid cells with either moderate (Botanical Resource Value > 5) or high (Botanical Resource Value > 10) levels of botanical resources
- More than 64,000 route segments covering more than 3,200 miles of routes designated for motorized vehicle travel occur in grid cells with no known sensitive botanical resources

Conclusions

- More than 3,000 miles of routes designated for motorized vehicle travel (approximately one-half of the designate routes in Alternative 4) occur in areas where they are possibly in conflict with sensitive botanical resources. Field surveys should focus on determining the extent to which these routes present threats to rare plants, rare vegetation types, and Unusual Plant Assemblages. Routes that present threats to sensitive botanical resources should be designated for closure. As presented, the DSEIS does not adequately analyze the actual threats to known botanical resources in the WEMO planning area. This should be rectified before the approval of the FSEIS. We present the results of this analysis as Appendix 1. These results should be considered route specific comments.
- Just because 3,200 miles of designated routes occur where no documented sensitive botanical resources are known does not mean that there are no sensitive botanical resources present in these location. That is to say, the absence of botanical resource data in a given grid cell does not confirm that botanical resources including rare plants and vegetation types are absent. Vast portions of the WEMO planning area have yet to be surveyed comprehensively by botanists. Areas with no documented sensitive botanical resources should be prioritized for surveys prior to route designation. If following surveys, routes are shown not to be in conflict with sensitive biological resources then BLM could consider designating these routes for motorized vehicle travel.

4. The DSEIS does not adequately assess direct impacts to documented occurrences of rare plants

A spatial query using ArcMap 10.5.1 of the CNDDB April Dataset indicated than 339 rare plant occurrences are located within 100 meters of routes designated for motorized vehicle travel in Alternative 4. We chose to use a buffer of 100 meters for this analysis in order to account for the indirect impacts to proposed routes. This analysis shows that 65 minimum rank taxa are likely to be impacted by motorized routes proposed in Alternative 4. Forty of these taxa are on CRPR 1B (Plants rare, threatened or endangered in California and elsewhere), 21 are on CRPR 2B (Plants rare, threatened, or endangered in California but more common elsewhere), 1 is on Rank 3 (Plants about which more information is needed), and 3 are on Rank 4 (Plants of limited distribution). We offer this analysis to highlight the potential for proposed routes to impact BLM sensitive plant species and other rare desert botanical resources. We advocate that the impacts of the proposed actions be evaluated with on-the-ground survey work. The results of our analysis are presented in the table below.

Scientific Name	CA Rare Plant Rank (CRPR)	Total # of Occurrences (CNDDB Apr 2018)	WEMO Intersect Analysis (# Occurrences)	Percent Potentially Affected
Abronia villosa var. *aurita*	1B.1	95	1	1.05
Aliciella ripleyi	2B.3	19	2	10.53
Androstephium breviflorum	2B.2	108	28	25.93
Asclepias nyctaginifolia	2B.1	67	1	1.49
Astragalus albens	1B.1	22	6	27.27
Astragalus bernardinus	1B.2	42	7	16.67
Astragalus hornii var. *hornii*	1B.1	14	1	7.14
Astragalus insularis var. *harwoodii*	2B.2	120	1	0.83
Astragalus jaegerianus	1B.1	22	7	31.82
Astragalus leucolobus	1B.2	94	1	1.06
Astragalus mohavensis var. *hemigyrus*	1B.1	2	1	50.00
Astragalus tidestromii	2B.2	72	1	1.39
Astragalus tricarinatus	1B.2	37	2	5.41
Boechera dispar	2B.3	68	4	5.88
Boechera lincolnensis	2B.3	14	4	28.57
Boechera shockleyi	2B.2	58	2	3.45
Calochortus palmeri var. *palmeri*	1B.2	84	1	1.19
Camissonia integrifolia	1B.3	4	1	25.00
Canbya candida	4.2	30	14	46.67
Castela emoryi	2B.2	55	9	16.36
Chorizanthe xanti var. *leucotheca*	1B.2	52	4	7.69

Clarkia xantiana ssp. *parviflora*	4.2	21	2	9.52
Coryphantha alversonii	4.3	55	4	7.27
Cryptantha clokeyi	1B.2	18	3	16.67
Cymopterus deserticola	1B.2	82	10	12.20
Cymopterus multinervatus	2B.2	31	3	9.68
Cymopterus ripleyi var. *saniculoides*	1B.2	6	2	33.33
Deinandra mohavensis	1B.3	77	2	2.60
Diplacus mohavensis	1B.2	60	31	51.67
Eremothera boothii ssp. *boothii*	2B.3	35	5	14.29
Eriastrum tracyi	3.2	119	4	3.36
Erigeron parishii	1B.1	44	7	15.91
Eriogonum kennedyi var. *pinicola*	1B.1	4	2	50.00
Eriogonum ovalifolium var. vineum	1B.1	36	6	16.67
Eriophyllum mohavense	1B.2	67	27	40.30
Erythranthe rhodopetra	1B.1	6	1	16.67
Erythranthe shevockii	1B.2	11	6	54.55
Eschscholzia minutiflora ssp. *twisselmannii*	1B.2	27	15	55.56
Euphorbia abramsiana	2B.2	109	1	0.92
Layia heterotricha	1B.1	123	1	0.81
Linanthus maculatus ssp. *maculatus*	1B.2	48	11	22.92
Lupinus pusillus var. *intermontanus*	2B.3	19	1	5.26
Matelea parvifolia	2B.3	26	1	3.85
Menodora spinescens var. *mohavensis*	1B.2	13	12	92.31

Mentzelia puberula	2B.2	11	1	9.09
Mentzelia tricuspis	2B.1	16	1	6.25
Mentzelia tridentata	1B.3	32	20	62.50
Monardella boydii	1B.2	3	2	66.67
Monardella linoides ssp. *oblonga*	1B.3	57	1	1.75
Opuntia basilaris var. *brachyclada*	1B.2	131	1	0.76
Pediomelum castoreum	1B.2	23	14	60.87
Penstemon albomarginatus	1B.1	23	12	52.17
Penstemon pseudospectabilis ssp. *pseudospectabilis*	2B.2	25	1	4.00
Petalonyx thurberi ssp. *gilmanii*	1B.3	18	1	5.56
Phacelia nashiana	1B.2	68	16	23.53
Phacelia novenmillensis	1B.2	30	1	3.33
Phacelia parishii	1B.1	9	4	44.44
Polygala acanthoclada	2B.3	27	1	3.70
Puccinellia simplex	1B.2	71	1	1.41
Saltugilia latimeri	1B.2	60	2	3.33
Sarcobatus baileyi	2B.3	3	1	33.33
Schoenus nigricans	2B.2	13	1	7.69
Sidalcea covillei	1B.1	42	1	2.38
Viola pinetorum ssp. *grisea*	1B.3	90	1	1.11
Wislizenia refracta ssp. *refracta*	2B.2	6	1	16.67

Shockingly, more than 25% of the known occurrences of 20 rare plants are occur within 100 meters of routes designated for vehicular travel in Alternative 4. Importantly, more than 50% of all known occurrences of the following globally rare taxa (CRPR 1B) occur within 100 meters of designated routes:

Menodora spinescens var. *mohavensis*
Monardella boydii
Mentzelia tridentata
Pediomelum castoreum

Eschscholzia minutiflora ssp. *twisselmannii*
Erythranthe shevockii
Penstemon albomarginatus
Diplacus mohavensis
Astragalus mohavensis var. *hemigyrus*
Eriogonum kennedyi var. pinicola

Why weren't the direct, indirect, and cumulative impacts to rare plants fully evaluated on a species by species basis in the DSEIS? While the tables presented in section 4.4 of the DESIS provide information on the amount of impacted acreage for rare plant species, it does not address the specific impacts of proposed routes. One of the basic tenets of NEPA is to disclose the effects of proposed actions (in this case the WMRNP) and to determine if these effects are significant. Furthermore, one of the implied goals of NEPA is to ensure that the effects of proposed actions are minimized such that species need not be listed under the Federal Endangered Species Act (FESA). In the case of *Menodora spinescens* var. *mohavensis*, 92% of known occurrences are within 100 meters of routes designated for motorized travel in Alternative 4. How does this taxon respond to vehicular disturbance, and is this plant vulnerable to the ongoing impacts associated with Alternative 4 in the WMRNP? The DSEIS does not include a specific analysis of the effects of designated routes on this species, or any other species for that matter. How will the species in the table above be affected (or are already being affected) by the designation of motorized routes in the WMRNP? Are these species (and others?) being pushed toward listing under FESA as a result of the proposed actions in the WMRNP? Furthermore, how are the effects to each of these species different in each of proposed alternatives? Why did BLM not choose to include an alternative that minimizes or eliminates the impacts of motorized routes on rare species of plants and animals?

Lastly, given that the land covered by the WMRNP must comply with the DRECP Land Use Plan Amendment (LUPA), why have potential impacts not been analyzed for their consistency with this law? Specifically, DRECP-LUPA-BIO-PLANT-2 states that an avoidance setback of 0.25 mile is required for all Focus and BLM Special Status Species occurrences. Also, DRECP-LUPA-BIO-PLANT-3 states that impacts to suitable habitat for Focus and BLM Special Status Species are "limited [capped] to a maximum of 1% of their suitable habitat throughout the entire LUPA Decision Area." The table above implies that impacts associated with the designation of vehicle routes may exceed those allowed under the DRECP LUPA. Table 3.4-4 provides the acreage of potential habitat for rare plant species in WEMO subregions. How were these data generated? Furthermore, the Tables in section 4.4 provide the "Acreage and Mileage of Routes Within Range or Other Protected Habitat for Special Status Plant Species." These data might provide the ability to analyze the consistency of the WMRNP with the DRECP with regard to rare plant impacts. Why hasn't BLM calculated the percentage suitable habitat for each species that will be impacted by proposed route designations conducted?

5. As an example, to better quantify the impacts of proposed routes CNPS conducted an on-the-ground analysis of rare plants in the Middle Knob ACEC in May 2018

These surveys:

- Were conducted by 10 professional botanists along MK-10, MK-14, and MK 118 on May 19 and 20, 2018.
- Included a qualitative assessment of the impacts of exiting routes on known rare plant populations and the documentation of new populations of rare species.
- Evaluated the presence of trails that are in use that are not currently inventoried

Key findings include:

- The observation and documentation of vehicular impacts to Element Occurrence #2 of *Eriogonum kennedyi* var. *pinicola* (Kern buckwheat, CRPR 1B) and a previously undocumented population of *Phacelia exilis* (Transverse Range phacelia, CRPR 4), which occurs in the same general vicinity. At this location, vehicle tracks have strayed south of MK10 to the top of a hill that once contained a more extensive population *Eriogonum kennedyi* var. *pinicola*. According to Dr. Ed Kentner (personal observation from 2013), this taxon previously occurred on this hill, and as a result of vehicle use a significant portion of this population has been eliminated. Given the global rarity of *Eriogonum kennedyi* var. *pinicola* (it is only known from 4 locations in the world) this represents a significant impact to this taxon.

Photo (above): Habitat of *Eriogonum kennedyi* var. *pinicola* disturbed by illegal OHV travel is shown in the foreground of this photo taken at Latitude/Longitude: 35.156353, -118.240745 on May 19, 2018. Photo by Linda Castro

- The documentation of non-inventoried, user-created motorcycle tracks including those documented in the photo below.

Photo (above): An uninventoried, illegal, user created motorcycle track taken at Latitude/Longitude: 35.15578, -118.24780 on May 19, 2018. Photo by Ed Kentner

Recommendations:

- BLM should conduct detailed field surveys for rare plants along proposed routes in the WEMO planning area. It should be noted that the survey efforts by CNPS were not sufficient to determine the extent of rare plants in the Middle Knob ACEC. Surveys, while timed to maximize the phenology for rare plants known from the region, were only conducted over the course of a single weekend in a year with rainfall that was below normal. As a result, rare plants that may be present earlier in the growing season or only present in years with normal or above normal rainfall were not detected. Also, the surveys conducted were opportunistic in nature and should not be substituted for surveys conducted in accordance with CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities[9] and USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants[10].
- BLM should analyze the effect of proposed routes in the Middle Knob ACEC and all other areas in the WEMO planning area on rare plant populations. Specifically, the impacts of illegal vehicle travel adjacent to MK10 on Element Occurrence (EO) #2 of *Eriogonum kennedyi* var. *pinicola* should have been disclosed in the DSEIS. More importantly, we recommend that MK10 be permanently closed to motorized vehicle travel at least 500 meters east of the extent of *Eriogonum kennedyi* var. *pinicola* EO #2.

[9] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline
[10] https://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/Documents/Listed_plant_survey_guidelines.PDF

Furthermore, we recommend that BLM takes actions to restore habitat that has been damaged as a result of illegal vehicle travel.

- BLM should conduct an on-the-ground analysis to document illegal, user-created motorcycle trails within WEMO. The types of user-create disturbances that we documented during our limited surveys of the Middle Knob ACEC have been documented by others in many locations in the WEMO planning area. Given that one of the goals of the WMRNP is to determine which roads/trails should be designated open and which ones should be permanently closed, the DSEIS is limited by a lack of on-the-ground survey work. How can BLM adequately designate open and closed routes without a detailed survey of baseline conditions?
- For more detailed comments on the Middle Knob ACEC please see the letter prepared by the California Wilderness Coalition and other organizations submitted on June 13, 2018.

6. **The WMRNP should provide a more detailed analysis of the impacts of routes that occur in lands with special designations including Areas of Critical Environmental Concern (ACECs), California Desert National Conservation Lands (CDNCLs), Lands with Wilderness Characteristics (LWCs), Unusual Plant Assemblages, National Monuments (NMs), and Wilderness Areas (WAs)**

Areas of Critical Environmental Concern (ACECs)

More than 83,000 route segments spanning more than 5,000 miles of roads are designated for motorized vehicle travel within ACECs in Alternative 4. These routes are located in 58 separate ACECs, which were designated to protect and manage some of the Mojave Desert's most important biological and cultural resources. ACEC's represent some of the most precious and vulnerable lands in the WEMO planning area. According to BLM's website[11], ACEC "designations highlight areas where special management attention is needed to protect important historical, cultural, and scenic values, or fish and wildlife or other natural resources." The very nature of ACECs necessitates site-specific planning and resource management actions must be specified for ACEC unit (see, for example, DRECP LUPA Appendix B). For each ACEC, provisions for vehicle-based recreation have been specified, including the signs required to identify open and closed routes, the designation of areas for parking, and the selection of dispersed camping areas, etc. Did BLM incorporate these ACEC-specific management actions into the WMRNP? Furthermore, are the route designations in the WMRNP consistent with the site-specific resource management goals that are associated with each ACEC? We contend that these well-intentioned ACEC-specific provisions should not be superseded by more general provisions in plans such as the WMRNP. The descriptions of the resources in the DSEIS (starting on 3.11-8) to be protected and managed in each ACEC and to be affected by the WMRNP are inadequately brief and uninformative. The DSEIS should be updated to indicate how the designation of routes in each ACEC is consistent or inconsistent with the management actions specific for each ACEC.

[11] https://www.blm.gov/programs/planning-and-nepa/planning-101/special-planning-designations/acec

The DRECP LUPA specifies a maximum amount of acreage that can be disturbed in each ACEC, and OHV routes are included in these calculations. The DRECP LUPA states that the "ground disturbance cap functions as an objective, triggering a specific disturbance mitigation requirement if the ground disturbance condition of the California Desert National Conservation Lands and/or ACEC is at or above its designated cap. The disturbance mitigation requirement remains in effect until the unit drops below its specified cap, at which time the disturbance cap becomes a limitation." Furthermore, section DRECP LUPA Section II.2.1 indicates that, "if the ground disturbance condition of the California Desert National Conservation Lands and/or ACEC is at or above its designated cap, the cap functions as an objective, triggering the specific ground disturbance mitigation requirement. Ground disturbance mitigation is unique to ground disturbance cap implementation and a discrete form of compensatory mitigation, separate from other required mitigation in the DRECP LUPA (see Glossary of Terms). The ground disturbance mitigation requirement remains in effect for all (see exceptions below) activities until which time the California Desert National Conservation Lands and/or ACEC drops below the cap, at which time the cap becomes a limitation."

DSEIS Table 3.11-3 reports the disturbance caps for each ACEC in the WEMO planning area. Section 3.11.8, titled "Disturbance Cap Calculations", provides very little information on how disturbance caps were calculated. Astonishingly, the disturbance cap for many ACECs has already been reached (see bolded numbers in the "Percent Disturbed Preliminary" column). Is the percent disturbed presented in this table primarily the result of disturbance associated with the proliferation of vehicle routes on BLM lands? If so, why wasn't this taken into account when disturbance caps were set in place in the DRECP LUPA? It goes without saying that disturbance caps that are already exceeded when a law is signed into action are illogical and useless. If the disturbance caps have been exceeded by the designation of routes in the WMRNP, why hasn't BLM proposed lower route mileage designations in ACECs in order to bring the number of disturbed acres below the maximum disturbance cap thresholds?

Lastly, given their sensitivity, we advocate that the impacts of proposed route designations be evaluated on a route-by-route basis within each ACEC. Our analyses (see Sections 2 and 3 above) indicate that BLM has not conducted an analysis of the route specific impacts to sensitive biological resources. This lack of analysis is inconsistent with the management actions specified for each ACEC. Also, disturbance caps have not been calculated for Horse Canyon and Sierra Canyon ACECs, both of which contain a significant number of proposed motorized routes in Alternative 4. This should be addressed in subsequent versions of the SEIS. Given that the impacts associated with each designated route are ongoing, we contend that the disturbance caps may apply to all of the proposed routes. As a result, BLM should be required to implement ground disturbance mitigation for all routes in ACECs where disturbance cap limitations have been exceeded.

California Desert National Conservation Lands (CDNCLs)

More than 34,000 route segments spanning nearly 2,000 miles of routes are proposed for motorized vehicle travel in CDNCLS in Alternative 4 of the WMRNP. The DRECP LUPA defines CDNCLs as "nationally significant landscapes within the CDCA with outstanding cultural, ecological, and scientific values." CDNCLs and ACEC's are not mutually exclusive,

such that many ACECs also occur in CDNCLs. The DRECP LUPA establishes CMAs to conserve, protect, and restore these landscapes. CMAs specify disturbance caps that trigger ground disturbance mitigation once they have been exceeded. Please see the discussion above on ACECs for our concerns regarding disturbance caps and CDNCLs, as the same comments apply to CDNCLs.

The DSEIS indicates that the disturbance caps have already been exceeded in a portion of the Mojave and Silurian Valley, Western Desert and Eastern Slopes, and South Mojave-Amboy CDNCLs. How were disturbance caps calculated for each CDNCL? Is the percent disturbed presented in this table primarily the result of disturbance associated with the proliferation of vehicle routes on BLM lands? If so, why wasn't this taken into account when disturbance caps were set in place in the DRECP LUPA? If the disturbance caps have been exceeded by the designation of routes in the WMRNP, why hasn't BLM proposed lower route mileage in CDNCLs in order to bring the number of disturbed acres below the cap?

Lands with Wilderness Characteristics (LWCs)
Alternative 4 includes more than 2,700 route segments spanning more than 156 miles designated for motorized vehicle travel within LWCs. In the simplest sense LWCs are defined by BLM[12] as lands that "possess sufficient size, naturalness, and outstanding opportunities for either solitude or primitive and unconfined recreation." These lands could and should be formally protected as Wilderness Areas as specified in the Wilderness Act of 1964[13]. With very limited exceptions, the Wilderness Act prohibits vehicular travel in designated wilderness areas. Based on our interpretation of LWCs in relation to the Wilderness Act we argue that the designation of motorized vehicle routes within LWCs is wholeheartedly illogical. BLM has provided no rationale for doing so in the DSEIS. We recommend that all proposed routes within LWCs be recommended for closure and restoration to natural conditions. Existing roads within LWCs also provide an excellent opportunity for non-motorized recreation, a feature that is sorely lacking in the WMRNP. Please see Section 8 below for a discussion on the need for balanced recreation options in the WEMO planning area.

Wilderness Areas (WAs)
More than 1,800 route segments totaling nearly 80 miles of roads are designated for motorized vehicle travel within WAs in Alternative 4. Motorized vehicle travel is prohibited in WAs, in accordance with the Wilderness Act of 1964 (see above). BLM has provided no defensible rationale for the inclusion of motorized vehicle routes in WAs. We recommend that all existing routes in WAs be designated for closure and the restoration of habitat to natural conditions. Existing roads within WAs would also provide an excellent opportunity for non-motorized recreation. Please see Section 8 below for a discussion on the need for balanced recreation options in the WEMO planning area.

National Monuments (NMs)

[12] https://www.blm.gov/programs/planning-and-nepa/planning-101/special-planning-designations/lands-with-wilderness-characteristics
[13] https://www.gpo.gov/fdsys/pkg/STATUTE-78/pdf/STATUTE-78-Pg890.pdf

The Antiquities Act of 1906[14] authorizes the President of the United States to "declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments." The utmost importance of some land in the WEMO Planning for the conservation of cultural and biological resources is exemplified by President Obama's designation of Mojave Trails and Sand to Snow NMs in 2016. The WMRNP proposes to designate more than 7,000 route segments totaling more than 402 miles of roads for motorized vehicle travel in these NMs. More than 27 miles of routes are designated for vehicular travel in Sand to Snow NM and 375 miles of routes have been designated for vehicular travel in Mojave Trails NM. We recommend that all routes in the two NMs be prioritized for non-motorized travel or designated for closure and restoration to natural conditions. Please see Section 8 below for a discussion on the need for balanced recreation options in the WEMO planning area.

Unusual Plant Assemblages (UPAs)
The 1980 CDCA Plan[15] "identified a number of unusual plant assemblages (UPAs) and established goals to preserve their habitat and ensure the continued existence of the plant assemblage. These UPAs include areas which are unique in the desert because of size, unusual age, areas associated with water (like riparian forests, mesquite bosques and marshes) and other unique vegetation areas. The CDCA Plan states that all UPAs will be taken into account when conducting site-specific NEPA analyses. The CDCA Plan also identified the need to conduct inventory to identify additional UPAs." Under this direction, the BLM, as required, has continued to inventory and identify UPAs. Furthermore, the CDCA Plan states that, "all UPAs will be taken into account when conducting all site-specific environmental impact analyses. Where possible, impacts on these UPAs will be avoided; where impacts cannot be avoided, every effort will be made to achieve the least degree of impact and to mitigate the areas through rehabilitation to stable conditions."

More than 1,400 miles of routes designated for motorized vehicle travel in Alternative 4 occur within UPAs. Has BLM conducted site-specific environmental analyses of route designations on UPAs, as is mandated by the CDCA? The DSEIS states that the, "the Court's evaluation of the impact of OHV use on Unusual Plant Assemblages (UPAs) concluded that there was no discussion of the impact on OHVs on specific UPA areas." Tables presented in Section 4.4 present the amount of disturbed acreage in a number of UPAs associated with each plan alternative. While this provides some information on the impacts of route designation of a whole this does little to assess the actual impacts on the sensitive biological resources in UPAs and should be deemed inadequate.

7. The DSEIS should include more detailed information on route closures and rehabilitation, and a timeline for doing so.

The preferred alternative includes the designation of nearly 6,300 miles of motorized vehicle routes. This will require to closure or nearly 10,000 miles of existing roads and linear disturbances. How does BLM propose to execute this task in an expedient manner? As the

[14] https://www.nps.gov/subjects/legal/the-antiquities-act-of-1906.htm
[15] Link to CDCA text on UPAs

DSEIS aptly states, "posting a "closed" sign may not be adequate to affect user behavior in all cases." We agree with this assessment and urge the BLM to draft a timeline of how they will effectively close 10,000 miles of routes. Even if, Alternative 4 is adopted how will the BLM ensure that closed routes actually remain closed?

Other federal agencies have managed for OHV use and associated environmental impacts in their jurisdictions. For example, the U.S. Forest Service (USFS) continues to manage for OHV use under their Travel Management Rule[16]. This rule has resulted in the closure of entire networks of roads to vehicle travel using locked gates and/or immovable barriers. Decisions to close specific roads and networks of roads were made following on-the-ground surveys of existing routes and an evaluation of their environmental impact. Why hasn't the BLM included a similar specific, route-based assessment in the current WMRNP? If the closure of individual routes as detailed in the DSEIS is not feasible or enforceable, perhaps BLM should consider closing networks of routes with gates and/or immoveable barriers?

Furthermore, BLM only cursorily deals with the large future task of restoring more than 10,000 miles of illegally created routes to natural conditions. Desert habitats are notoriously difficult to restore, and if left alone can take decades to return to natural conditions. If left alone, these scars on the landscape will continue to contribute to erosion and the spread of invasive plant species. The BLM should detail a plan to systematically restore these damaged habitats, starting with the most degraded habitats first. Given the legacy of decades of mismanagement and neglect on BLM lands in the WEMO planning area with regards to vehicle-based recreation "doing nothing" is no longer an option.

8. The BLM should adopt a more balanced recreation plan that does not favor motorized recreation over non-motorized recreation

In Alternative 4, the WMRNP specifies 182 miles of roads for non-motorized recreation. The 6,313 miles of motorized routes proposed in the preferred Alternative 4 amounts to 34.7 miles of vehicle-based travel for every mile of non-motorized recreation. Existing routes that are located in ACECs, LWCs, CDNCLs, LWCs, UPAs, WAs, and NMs provide excellent opportunities for non-motorized recreation. A mileage ratio of 1:1, motorized to non-motorized routes for recreation would be a balanced and fair proposal. Why has the BLM prioritized motorized recreation over other forms of recreation? Furthermore, non-motorized recreation is more consistent with the management of BLM lands for a multitude of uses, especially the preservation of our precious biological resources. The BLM should not favor one use over another.

Once again, thank you very much for the opportunity to provide comments on the West Mojave Route Network Program. It should be noted that CNPS, along with a number of partner organizations and members of the public, asked BLM for an extension of the 90-day comment period to give us more time to analyze this comprehensive and complicated plan. We only received the GIS layers of the proposed routes on April 24th, leaving us a little more than a

[16] https://www.fs.fed.us/recreation/programs/ohv/final.pdf

month to conduct the analyses necessary to review the plan, and to perform field-based reconnaissance. In the future, BLM can expect more constructive and informative comments on large, complex projects such as this if reasonable requests for the extension of the comment period are granted.

Please feel free to contact me with any questions.

Sincerely,

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