



April 22, 2009

VIA EMAIL & CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
7008 0500 0000 1716 3077

Carrizo Plain National Monument RMP  
Bureau of Land Management  
Bakersfield Field Office  
3801 Pegasus Drive  
Bakersfield, California 93308  
cacarrizormp@ca.blm.gov

RE: Comments on Draft RMP/EIS for the Carrizo Plain National Monument

Dear Carrizo Plain National Monument RMP Staff:

Thank you for this opportunity to comment on the Draft Resource Management Plan/Draft EIS (RMP/EIS) for the Carrizo Plain National Monument. We appreciate your efforts in involving the public in this important process.

Los Padres ForestWatch is a local, community-based nonprofit organization working to protect wild landscapes and wildlife habitat in the Los Padres National Forest, the Carrizo Plain National Monument ("Monument"), and other public lands along California's central coast. We are supported by more than 800 members across the region who share our desire to protect the scenic vistas, solitude, cultural resources, recreation opportunities, and unique plants and animals of the Monument.

We are particularly concerned about the impacts of oil and gas exploration and development on the Monument. As you know, for the last four years, ForestWatch has been active in protecting lands in and adjacent to the Monument from oil development. In 2005 and 2006, we protected 3,500 acres in Wells Canyon on the south side of the Monument from exploratory oil drilling. Also in 2005 and again in 2006, we were successful in removing four parcels totaling 1,755 acres adjacent to the Monument from an oil lease sale, plus several other parcels in close proximity to the Monument boundary. In 2007, a coalition of conservation organizations including ForestWatch submitted detailed scoping comments on the draft RMP, including detailed comments on oil exploration and development in the Monument. And in 2008, a coalition of conservation organizations including ForestWatch urged the U.S. Bureau of Land Management (BLM) to require preparation of an Environmental Impact Statement prior to approving any oil exploration in the Monument. We continue to remain actively involved in all issues related to oil exploration and development on the Monument, as such activities have the potential to seriously degrade the resources that the Monument was established to protect.

We have carefully reviewed the RMP/EIS, and we respectfully submit the following comments with an eye towards strengthening the sections of the document relating to oil and gas exploration and development. This letter supplements the comments outlined in the letter submitted to you today by a coalition of conservation organizations, including ForestWatch.

## **I. General Comments**

Thank you for prioritizing the purchase of private mineral rights. As discussed above, the BLM has already recognized the importance of evaluating potential impacts from oil and gas exploration within the Carrizo Plain National Monument by requiring an EIS analysis on the Occidental/Vintage Petroleum proposal. The RMP should establish that the highest levels of analysis will be required for any proposal for oil and gas exploration or development within the Monument's boundaries and state that an EIS will be presumed to be the appropriate level of analysis, given the likelihood of damage to the Monument from exploration and development activities.

According to the draft RMP/EIS, approximately 53-56% of the Monument's mineral rights are privately owned. In addition, nine existing oil leases currently operate on the Monument. Although the Monument was established "subject to valid existing rights," the BLM also has an obligation to manage these lands for the protection of the Monument's values. As the manager of the surface, the BLM has the authority to deny requests for access to conduct geophysical exploration and applications for permits to drill altogether, or to impose other restrictions on development to protect important ecological and cultural values.

The damage associated with oil and gas exploration should not be risked on the Carrizo Plain National Monument without preparation of an EIS and full consideration of prohibiting access altogether or imposing stringent requirements on any such activity. Similar concerns apply to any further development activities, which also involve long-term surface disturbance. BLM should set specific limitations and restrictions on the manner in which oil and gas development can occur to access private minerals.

We urge the BLM to incorporate additional measures into Alternative 2 (the preferred alternative) to maximize protection of Monument values from the adverse impacts of oil exploration and development. We support the approach in Alternative 1 of increasing the frequency of inspections, prioritizing termination of all idle leases in the Monument, and maximizing interim reclamation of redundant or unnecessary disturbed areas. These management actions, when combined with those outlined in Alternative 2 and additional changes outlined below, will help ensure that such impacts are minimized or avoided altogether.

## **II. Comments on Goals, Objectives, and Management Actions (Section 2.19)**

The draft RMP/EIS contains proposed goals, objectives, and management actions for existing and future oil exploration and development on the Monument as part of the BLM's preferred alternative. DEIS at 2-112 to 2-118. We recommend the following changes to make this section more consistent with the Monument Proclamation and other state and federal laws and

regulations. In addition to the language proposed in the Draft RMP, there are also many other standards that could be incorporated into the RMP. We suggest that, as a starting point, the BLM incorporate the standards and guidelines set out in the Los Padres National Forest oil drilling plan (attached to these comments), which would still require substantial improvement to protect Monument objects.

## **2.19.1 Goals, Objectives, and Management Actions Common to All Action Alternatives**

### **2.19.1.1 Goals**

- Manage the exploration, ~~and~~ development, and abandonment of oil and gas on existing federal leases in a manner that protects the objects of the Monument Proclamation.
- Work with federal, state, county, and local agencies to ensure that the mission and purpose of the CPNM are furthered and only reasonable restricted uses of public lands are made to access and develop private mineral estate if such uses cannot be limited to private lands.

### **2.19.1.2 Objectives**

#### **All Mineral Exploration and Development**

- Establish and update standard operating procedures (SOPs) and implementation guidelines, including best management practices (BMPs), for all projects to ensure that monument resources are protected while allowing reasonable access for valid existing rights for mineral development.

#### **Existing Oil and Gas Leases**

- Manage existing leases to ensure timely lease restoration.
- Enforce good housekeeping requirements (that is, require operators to maintain a neat and orderly appearance of sites, remove junk and trash, and otherwise minimize landscape intrusions).
- Manage leases to minimize fragmentation of habitat (including removal of redundant or unused roads, pipelines, storage tanks, and other infrastructure).
- Process permits in a timely fashion as required by the *Leasing Reform Act* of 1987, Onshore Orders and Notices to Lessees, the *Energy Act* of 2005, and other laws, regulations, and policies, and consistent with federal, state, and local laws and regulations and dependent on agency staff and resource limitations.

#### **Geophysical**

- Authorize geophysical activities within the Monument for exploration of mineral resources inside or outside the boundary of the Monument in a manner that maximizes protection of the objects of the Monument Proclamation.

### 2.19.1.3 Management Actions

#### *Existing Oil and Gas Leases*

- All projects will be reviewed and the SOPs contained in Appendix O (Biological Standard Operating Procedures) and Appendix P (Standard Operation Procedures for Oil and Gas) will be ~~applied~~ incorporated into existing and new lease terms. This review and incorporation will occur within two months of the effective date of this RMP.
- BLM inspection staff will inspect all facilities for environmental compliance on federal lands monthly. Shut-in or abandoned wells will be inventoried and evaluated for final plugging and restoration prioritization. This inventory and evaluation will be completed within six months of the effective date of this RMP
- As leases stop producing, process termination or expiration in a timely manner.
- Conduct ~~annual~~ quarterly surface inspection on all leases within the CPNM to identify and remediate any hazards or impacts to Monument resources such as threatened and endangered species and cultural resources.
- Conduct training for operators regarding CPNM management goals and sensitive resource values and recommended best management practices to protect these values. ~~Additional CPNM-specific BMPs may be developed.~~ Develop and revise CPNM-specific BMPs every five years, or more frequently as necessary to protect these management goals and sensitive resource values.
- Manage the existing oil producing acreage on the southern side of the Caliente Range to ~~maintain~~ maximize the protection of ecological processes and to assure prompt lease restoration upon final abandonment of the last well.
- Review (in conjunction with operators) existing disturbed areas (such as roads and well pads) and require reclamation of those areas determined to be redundant or no longer needed. Conduct this review within one year of the effective date of this RMP.
- Design roads, well pads, and facilities to impact and fragment the least acreage ~~practicable~~. ~~New/existing facilities will~~ would be designed/modified to maintain natural drainage and runoff patterns, reduce visual impacts, and reduce hazards to wildlife, especially California condors.
- Ensure best management practices are followed. Examples include:
  - Placing pipelines along roads and consolidating facilities ~~when feasible~~.
  - Selecting appropriate paint colors to minimize visual impacts and otherwise meeting VRM goals.
  - Timely interim reclamation/reduction of footprint of operations after initial drilling.
- Wells that are not commercially developed would be reclaimed to natural contours and revegetated ~~as soon as appropriate~~ immediately; that is, restoration methods would consider timing of planting, acceptable species and evaluation criteria, and would be tailored to area-specific resource conditions and be compatible with the Monument Proclamation.
- Applications for Permit to Drill, Sundry Notices (leasehold activities requiring surface disturbance), and Final Abandonment Notices would be reviewed using the existing NEPA approval process. The BLM will promptly make available for public review on the internet all such applications and notices.

- Require timely plugging and abandonment of depleted wells. This includes plugging the well bore with cement, removing all materials and equipment, and recontouring/revegetation as specified in the conditions of approval.

*Private Mineral Estate (Use of BLM Surface for Private Mineral Activities)*

- For all private oilfield actions that require use of BLM surface, including cross-country travel on BLM lands to reach private minerals, authorization would be required that would take avoidance measures and mitigation that would protect the objects of the Monument Proclamation. *[This sentence is grammatically confusing.]*
- BLM would meet with operators and other interested parties to determine discuss what ~~sort of~~ limitations could will be placed on exploration and development activities while still to meeting the legal requirements to provide “reasonable access.” This would include multiple wells per pad, seasonal restrictions, modifications to meet visual goals, denial of such activities altogether, and others.
- Use of BLM surface will only be allowed if environmentally acceptable access cannot be secured through private lands, and only after evaluation in an Environmental Impact Statement that complies with the National Environmental Policy Act.

### **2.19.3 Alternative 2 (Preferred Alternative)**

#### **2.19.3.1 Existing Oil and Gas Leases**

**Objective:** Manage existing leases with additional requirements (above federal standards) to protect Monument resources.

#### **Management Actions**

- For all new lease actions, require protection based on lease stipulations, conditions of approval, and BLM regulations, consistent with other BLM leases within threatened and endangered species habitat.
- Encourage and work with operators to implement management actions to lessen the visual impacts of existing developments.
- Over and above the requirements of BLM’s Inspection and Enforcement Strategy, petroleum engineering technicians would conduct detailed lease inspections of federal oil facilities and wells ~~more often than once every three years, with a goal of at least every other~~ year. Inspections would occur more often when problems are found. The purpose of the inspections would be to ensure compliance with all laws, regulations, conditions of approval, and other requirements that would affect areas such as safety, production and royalty accountability, and the environment.
- Encourage operators to concentrate on using federal wells to meet California Division of Oil, Gas, and Geothermal Research idle well requirements. These requirements call for each operator to eliminate (return to production or plug) 4 percent of all 5-year idle wells (federal or private) per year. BLM would encourage operators to focus on federal wells within the Monument.
- Prioritize termination of all idle leases in the Monument.

- Allow access for geophysical exploration, but with conditions of approval that ~~ensure~~ maximize protection of ~~resources~~ Monument objects (such as threatened and endangered species).
- Encourage operators to conduct interim reclamation of redundant or unnecessary disturbed areas.

### 2.19.3.3 Private Mineral Estate (Use of BLM Surface for Private Mineral Activities)

**Objective (Non-Geophysical):** Allow for reasonable exploration and development of private mineral estate consistent with protection of Monument resources.

#### *Management Actions*

- Primary focus is to attempt to acquire private minerals from willing sellers whenever surface estate is purchased.
- Secondary focus is to attempt to acquire (from willing sellers) split estate private minerals (where BLM already owns the surface).

**Objective (Geophysical Exploration):** Authorize geophysical activities within the Monument for exploration of mineral resources inside or outside the boundary of the Monument in a manner that protects the objects of the Monument Proclamation.

#### *Management Action*

- Only authorize geophysical activities that do not result in damage to the objects of the Monument Proclamation. Such activities would include walking out and/or the use of helicopters to deploy geophone lines. [*This language infers that using helicopters would not result in damage, nor would the actual detonation of explosives.*] On a case-by-case basis, ATVs could be used to deploy geophone lines. Other activities would include limiting all source points (vibroseis and shot holes) to existing roads. On a case-by-case basis, drilling of shot holes using heliportable or small portable drills for underground detonation would be allowed off road.

## III. Comments on Standard Operating Procedures (Appendix P)

The draft RMP/EIS references a set of standard operating procedures, best management practices, implementation guidelines, and conditions of approval for oil and gas exploration and development activities. We recommend the following changes to this section to ensure consistency with the Monument Proclamation and other state and federal laws and regulations.

Propose the following changes to Appendix P, to be consistent with our proposed changes to the RMP objectives and goals:

- All oilfield activities that occur on land where BLM has an interest, whether mineral or surface estate, would be conducted with the least impact ~~practicable~~ to sensitive resources.

- Wells that are not commercially developed would be reclaimed to natural contours and revegetated ~~as soon as appropriate~~ immediately; that is, restoration methods would consider timing of planting, acceptable species and evaluation criteria, and would be tailored to area-specific resource conditions and be compatible with the monument proclamation.
- Applications for Permit to Drill (APDs), Sundry Notices (leasehold activities requiring surface disturbance), and Final Abandonment Notices would be reviewed using the existing NEPA approval process. The BLM will promptly make available for public review on the internet all such applications and notices.
- Timely plugging and abandonment of depleted wells ~~would~~ will be required. This includes plugging the well bore with cement, removing all materials and equipment, and recontouring/revegetation as specified in the conditions of approval.
- Design roads, well pads, and facilities ~~for exploratory wells~~ to impact and fragment the least acreage ~~practicable~~. New/existing facilities ~~will~~ would be designed/modified to maintain natural drainage and runoff patterns, reduce visual impacts, and reduce hazards to wildlife, especially California condors. Noncommercial wells would be restored immediately as soon as appropriate using BLM restoration methods.
- Only geophysical activities that do not result in damage to the objects of the Proclamation would be authorized. Such activities would include walking out and/or the use of helicopters to deploy geophone lines. [*This language infers that using helicopters would not result in damage, nor would the actual detonation of explosives.*] On a case by case basis, ATVs could be used to deploy geophone lines. Other activities would include limiting all source points (vibroseis and shot holes) to existing roads. On a case by case basis, drilling of shot holes using heliportable or small portable drills for underground detonation would be allowed off-road. After the data gathering phase, resource specialists would evaluate impacts and recommend remediation when appropriate.
- Good housekeeping requirements ~~would~~ will be enforced (that is, operators ~~would~~ will be required to maintain a neat and orderly appearance of sites, remove junk and trash, and otherwise minimize landscape intrusions).
- Sufficiently impervious secondary containment, such as containment dikes, containment walls, and drip pans, ~~should~~ must be constructed and maintained around all qualifying petroleum facilities, including tank batteries and separation and treating areas consistent with the Environmental Protection Agency's Spill Prevention, Control, and Countermeasure regulation (40 CFR 112).
- Chemical containers ~~should~~ must not be stored on bare ground, exposed to the sun and moisture. Labels must be readable. Chemical containers ~~should~~ must be maintained in good condition and placed within secondary containment in case of a spill or high velocity puncture.
- Pipelines ~~would~~ will be placed within existing disturbed rights-of-way, such as road shoulders, whenever feasible.
- Roads ~~would~~ will be designed to an appropriate standard no higher than necessary to accommodate their intended functions.
- New wells and roads ~~would~~ will be located in areas where cut and fill ~~would~~ is minimized ~~to the extent practicable~~.

- Operators ~~would~~ will be ~~encouraged~~/required to place multiple wells on a single pad where feasible in order to minimize unnecessary disturbance.
- Operators ~~would~~ will be required to maintain clean well locations and to remove trash, junk, and other materials not in current use.
- Other BMPs that ~~may~~ will be applied to operations at the CPNM can be found on the web at:  
[http://www.blm.gov/wo/st/en/prog/energy/oil\\_and\\_gas/best\\_management\\_practices.html](http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices.html)

#### IV. Comments on Draft EIS

Accompanying the draft RMP is a draft Environmental Impact Statement (“DEIS”) that discusses existing oil and gas operations and baseline environmental conditions, and evaluates the environmental impacts to Monument values. We submit the following comments to ensure that the DEIS adequately evaluates the environmental impacts of RMP implementation.

##### Chapter 3.19 (Affected Environment – Minerals)

##### 3.19.1 Private Mineral Estate within the Monument

The DEIS states, “Approximately 53 percent of the mineral estate within the Monument is privately owned.” DEIS at 3-93. Elsewhere in the DEIS, this figure is placed at 56 percent. See, for example, DEIS at 3-116 (“approximately 56 percent of the mineral estate is privately owned”). These figures should be consistent.

##### 3.19.2 Mineral Resources within the Monument

The DEIS discusses current oil and gas production in the Monument. We propose the following changes: “The only production in the Monument, including both private and federal, is near the southwest boundary, mostly within the boundaries of the Russell Ranch unit and the Morales Canyon Field (see Map 3-17, Producing Oil Fields in the Carrizo Plain National Monument). Private leases are not recorded with BLM, so it is unknown whether there are private leases within ~~BLM~~ the Monument (other than within the Russell Ranch Unit, a federal unit that contains both private and federal leases).” DEIS at 3-94.

With respect to the last part of this excerpt, it would be helpful for both the public and decision-makers alike to have a firm understanding of the location and extent of private leases within the Monument boundary. Moreover, such information is required by CEQ’s NEPA Guidelines regarding incomplete or unavailable information. See 40 CFR § 1502.22(a) (“If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.”) It is important that the EIS contain adequate information about the extent of private mineral leases within and adjacent to the Monument boundaries. This information is available, and would not only provide baseline data for the environmental analysis, but would also assist with the analysis of cumulative impacts.



## Chapter 4.2.5 (Environmental Consequences – Special Status Animals)

### 4.2.5.1 Giant Kangaroo Rat

In discussing the impacts of geophysical activities on the valley floor, the DEIS states that oil development there would “destroy burrows and remove vegetation within the construction footprint.” DEIS at 4-20. However, “mitigation measures that require the capture and release of animals trapped from within and directly adjacent to the construction footprint would be implemented.” DEIS at 4-20. This capture-and-release requirement should be specified in the RMP, along with other species-specific requirements. In addition, the capture-and-release policy should be evaluated in the DEIS, as the DEIS admits that it has achieved only a 60% survival rate in other areas. Even with this mitigation measure in place, significant impacts to kangaroo rats could still occur. Therefore, the DEIS must analyze the impacts to kangaroo rats caused by “capture and release” activities, including the impacts of at least a 40% mortality rate.

Second, the DEIS states that after the site is abandoned, “restoration would be initiated immediately and the site would likely be inhabited by kangaroo rats within several months.” DEIS at 4-20. However, the DEIS provides no evidence to support the conclusion that kangaroo rats re-inhabit disturbed habitats, nor the timeframe for them doing so.

The DEIS also mentions vehicle strikes and mortality, but the only analysis of impacts is that “BLM requires project vehicle speeds below 20 miles per hour off of county roads to minimize the risk of vehicle strikes.” DEIS at 4-20. The DEIS fails to discuss whether this is an effective mitigation strategy – for example, it should discuss whether vehicle strikes may still occur at these reduced speed limits, as well as the likelihood of vehicle operators abiding by the speed limit, and how such a limit would be monitored and enforced. In addition, the DEIS should consider vehicle strikes on County roads, where the 20 m.p.h. speed limit does not apply. This is particularly important for any possible exploration activities on the valley floor, as vehicles associated with exploration there would likely use Soda Lake Road and other county-maintained roads.

The DEIS also contains an inadequate analysis of the impacts of geophysical activities on giant kangaroo rats. The DEIS states that “the effects of seismic testing noise on the kangaroo rat hearing are unknown” and that “specific monitoring of giant kangaroo rat activity response to shot hole drilling and detonations has not been conducted to date.” DEIS at p.4-21. This suggests that the BLM does not know what the impacts of geophysical activities are on giant kangaroo rats, and in light of this unknown or unavailable information, should limit such activities on the Monument as much as possible. This lack of information must also comply with the CEQ’s NEPA Guidelines regarding incomplete or unavailable information. See 40 CFR § 1502.22(a).

### 4.2.5.2 San Joaquin Kit Fox

The DEIS states that potential impacts to San Joaquin kit fox from oil development include destruction of dens. However, the DEIS then dismisses this impact, stating that “Since kit fox use multiple dens, the occasional loss of a den is not expected to be significant.” DEIS at p.4-31.

The DEIS does not cite to any source for this statement, and we question whether it is true. The destruction of den sites (particularly den sites that are occupied) of any endangered or threatened species should always be considered to be “significant.” The DEIS must evaluate the effects of damage or destruction to den sites caused by oil exploration and development.

The DEIS states, “Disturbance to dens, especially natal dens, would be minimized with the implementation of SOPs and survey and avoidance measures required by BLM for all actions.” DEIS at 4-31. However, the SOPs included in Appendix P to the DEIS do not specifically address den disturbance. Again, the BLM should develop species-specific SOPs, including one that would specifically limit or avoid impacts to dens, and include all species-specific SOPs in the RMP. Likewise, the referenced “survey and avoidance measures” should be included or incorporated in the RMP.

The DEIS states that the Carrizo Plain is one of three core populations identified as important for the recovery of the San Joaquin kit fox. DEIS at 4-31. It is important to avoid any impacts to this core population. Avoiding all impacts to this core population is particularly important in light of the fact that the Monument is the only one of the three core areas that has made substantial progress in meeting land conservation goals. DEIS at 4-117. Despite the importance of the Monument core area, the DEIS merely states that

habitat loss from projected oil exploration and development in the Monument is not expected to conflict with recovery plan goals since individual projects are expected to be relatively small (0.5 acres per well pad and 0.3 to 0.75 acres of road per well) compared to the home range of a kit fox (average 1,144 acres) and few wells are projected to be drilled. In addition, standard kit fox mitigation measures and BLM SOPs will be applied as appropriate to all BLM authorizations and projects so that impacts to dens would be avoided.

*Id.* Even though the actual footprint of projected oil exploration and development in the monument is “relatively small,” the DEIS must also evaluate the impacts of such development on habitat connectivity and fragmentation of den sites. In addition, for the reasons outlined previously, the DEIS must include more information and analysis about “standard kit fox mitigation measures” and SOPs so that the public and other public agencies have an opportunity to evaluate how effectively these measures are at minimizing or avoiding impacts to dens.

The DEIS also erroneously assumes that disturbed areas will be restored “immediately” and that restored sites would be inhabited by kit foxes and kangaroo rats “within several months.” DEIS at 4.32. The DEIS provides no citation for this conclusion. Have studies been conducted to determine the recolonization rates of disturbed areas once they are restored? And what mechanisms are in place to ensure that such restoration occurs “immediately?”

The DEIS acknowledges that vehicle strikes are one of the leading causes of kit fox mortality, particularly in oil fields. However, the DEIS needs more analysis on this issue. The BLM states that it requires vehicle speeds “below 20 miles per hour off county roads” to minimize the risk of vehicle strikes.” DEIS at 4-32. The DEIS should discuss whether a 20 mph speed limit is sufficient to avoid vehicle strikes, whether such a limit has been complied with in the past, and

what mitigation measures are proposed for County roads, where the 20 mph speed limit does not apply. In addition, the RMP should propose other strike avoidance measures, such as limiting or prohibiting nighttime travel by oil operators. Kit foxes are primarily nocturnal, so the risk of vehicle strikes increase at night, particularly relevant during 24-hour drilling operations.

The DEIS states that “oil development activities on 30 acres of the valley floor would have minor impacts to the local and Monument-wide populations of San Joaquin kit foxes considering the extensive distributions within the Carrizo Plain and Elkhorn Plain portions of the monument.” DEIS at 4-32. This analysis should take into account the effects on habitat fragmentation caused by such development, not just on the 30-acre development footprint. It should also account for vehicle strikes while traveling to and from these areas totaling 30 acres.

When discussing the Russel Ranch oilfield, the DEIS states that kit foxes are not common in this area and that impacts would be avoided by implementing “den avoidance measures.” The DEIS must disclose the nature of these “den avoidance measures” and discuss their effectiveness at avoiding impacts to den sites.

#### 4.2.3.5 Blunt-Nosed Leopard Lizard

In its analysis of impacts to blunt-nosed leopard lizards from oil development and exploration, the DEIS uses language similar to that used in previous sections analyzing impacts to San Joaquin kit fox and giant kangaroo rat. DEIS at 4-41 to 4-42. We incorporate our comments on those species impacts into this section.

#### 4.2.5.3 San Joaquin Antelope Squirrel

The analysis of impacts to San Joaquin antelope squirrels from oil development and exploration also uses language similar to that used in previous sections, and our previous comments apply. In addition, the DEIS states, “Exclusion barriers may be constructed to remove and exclude antelope squirrels from the construction area.” DEIS at 4-53. The DEIS states that this measure has been applied elsewhere, but it does not say whether such measures were successful in preventing direct mortality to antelope squirrels.

#### 4.2.5.6 California Condor

The DEIS states that condors “are not known to frequent (currently or historically) the oilfield areas within the Monument.” DEIS at 4-67, 4-68. The DEIS should use clearer language to describe the frequency of condor visitation to oilfield areas. Even if condors did not visit these areas “frequently” as the DEIS suggests, they may visit these areas occasionally, or intermittently, or very rarely, or not at all. Providing a clear baseline standard is important for the subsequent impacts analysis. In addition, we recommend that that BLM work with the U.S. Fish & Wildlife Service to obtain accurate GIS data of current condor roosting, foraging, and flyway areas on the Monument.

The DEIS lists several impacts to condors from oil activities, including contamination of harmful liquids, collisions with power lines, electrocution, and ingestion of trash. DEIS at 4-67, 4-68.

The DEIS should add “noise” to this list, as the U.S. Fish & Wildlife Service has voluminous data on the impacts of noisy drilling operations on nearby condors. Another potential impact from oil drilling is “habituation to human presence,” which exacerbates many of the impacts (such as microtrash, electrocution, and contamination) listed above.

The DEIS states that “there are no historic or likely condor nesting locations near the Monument oilfields.” DEIS at 4-67, 4-68. The DEIS should also evaluate proximity of historic, current, or suitable condor *roosting* areas to oil fields. Roosting areas, including ledges, snags, and open grasslands, play an important role in condor feeding habits, as condors will typically roost in an area for quite some time before feeding. Undisturbed roosting sites also provide areas for condors to stop over while flying long distances.

The DEIS states that the placement of new transmission lines, towers, or other structures will be “restricted or prohibited in condor habitat.” DEIS at 4-68. These structures should be prohibited altogether in condor habitat, not merely restricted. In addition to new structures, the BLM should also require existing structures to be “condor safe” by installing appropriate exclusion devices.

#### 4.2.5.12 Longhorn, Vernal Pool, and Other Fairy Shrimp

The DEIS states that oil drilling and exploration will have a “negligible effect on fairy shrimp populations.” DEIS at 4-93. The DEIS should describe how it arrived at this conclusion, given the fact that Map 3-2 shows a majority of the valley floor as “Designated Critical Habitat for Longhorn and Vernal Pool Fairy Shrimp.” If oil exploration and/or development is to occur in vernal pool habitat, then this must be disclosed and its impacts must be evaluated.

#### 4.2.6.1 Pronghorn

#### 4.2.6.2 Tule Elk

The DEIS does not include any analysis of the impacts of oil exploration and development on pronghorn and tule elk populations. This is especially important, as much of the valley floor is pronghorn habitat. Map 3-3. The DEIS should evaluate the impacts of oil exploration and development on the valley floor on pronghorn and its habitat, with particular emphasis on habitat connectivity, migration corridors, vehicle strikes, fencing, the availability of forage, and proximity to calving and feeding areas.

#### 4.2.7.3 Cumulative Impacts

The DEIS only contains a one-page summary of cumulative impacts. With respect to oil development and exploration, the DEIS should contain a thorough analysis of cumulative impacts, particularly with respect to other oil operations in the area and their impacts on the wildlife species listed above. Specifically, the cumulative impacts analysis should include an evaluation of impacts from past, present, and reasonably foreseeable future oil leases in the southern San Joaquin Valley, Cuyama Valley, Los Padres National Forest, and Hopper Mountain National Wildlife Refuge. Drilling in these areas has caused particular impacts to California condors and San Joaquin kit foxes, and these cumulative impacts must be analyzed as part of the proposed RMP for the Carrizo.

#### 4.5 Impacts Analysis for Air Quality

San Luis Obispo County, where most of the Monument lies, is in non-attainment of state standards for ozone and PM<sub>10</sub>. DEIS at 3-52. In addition, the DEIS states that “there are insufficient air quality monitoring data available to classify attainment status for federal standards for San Luis Obispo County for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>. DEIS at 3-53. Because of the area’s non-attainment status, it is important that any additional emission sources be heavily scrutinized and limited as much as possible. For any new emission sources that are allowed, it is important for the DEIS to adequately evaluate the cumulative impacts of these sources when combined with the existing non-attainment status.

Currently, the DEIS does not satisfy these standards. The DEIS merely states, “Due to the limited amount of oil and gas development proposed under All Action Alternatives, effects to air quality will be limited in amount and intensity and will have minor impacts.” DEIS at 4-153. In the cumulative impacts analysis, the DEIS merely states that “proposed management actions within the CPNM will have little effect on regional air quality conditions,” and that “[m]anagement activities that produce harmful emissions are limited in scope and duration.” DEIS at 4-158. The cumulative impacts analysis must take into account additional air emissions produced by existing and reasonably foreseeable future oil exploration and drilling activities. This includes the use of roads on and around the Monument to access oil operations, since “dust generated from road use, maintenance, and rehabilitation” is one of the primary sources of air pollution originating from public lands on the Monument. DEIS at 3-53.

#### 4.6 Impact Analysis for Soils

The DEIS should evaluate the impacts of oil spills from past, present, and future oil exploration and development activities on and around the Monument. The DEIS only contains one sentence evaluating the impacts of spills: “Impacts from spills/contamination are expected to be very localized because all activities will be subject to spill prevention and control plans, and any contamination will be removed/mitigated as required in those plans.” DEIS at 4-160. If these plans are to be incorporated by reference into the DEIS, then the BLM must comply with 40 C.F.R. § 1502.21 (“The incorporated material shall be cited in the statement and its content briefly described.”) In addition to briefly describing the spill prevention and control plans, the DEIS should also discuss whether they have been effective in the past at preventing and controlling spills in and around the Monument. The DEIS should also include a description and analysis of the extent of past spills in and around the Monument to provide baseline data. Since spills occur even with spill prevention and control plans in place, the DEIS should also evaluate the likelihood of future spills and evaluate the impacts thereof.

##### 4.7.1 Impact Analysis for Water Resources

The DEIS contains an inadequate discussion of the impacts of existing and reasonably foreseeable future oil exploration and drilling on water resources. Specifically, the DEIS states, “The continued development of the existing federal leases would have negligible impacts to water quality in the Cuyama River watershed from runoff from roads and well pads. State and

BLM standard operating requirements include provisions for controlling erosion and other of site impacts from these developments. The potential water use associated with private mineral estate development is discussed under cumulative impacts.” DEIS at 4-172. While runoff from roads and wellpads may have a negligible impact, the DEIS must also evaluate potential groundwater contamination from oil exploration and drilling operations. The DEIS should also disclose quantities of groundwater withdrawals from existing drilling operations in and around the Monument, and evaluate the impacts of reasonably foreseeable future operations.

The cumulative impacts analysis defers all analysis of groundwater issues to the site-specific stage. DEIS at 4-177 (“BLM would evaluate any such proposal for potential impacts to groundwater quantity or quantity [sic] and associated impacts to other Monument resources.”) These impacts must be analyzed now, in the RMP EIS.

The DEIS evaluation of groundwater impacts also states that current data is not available, but does not comply with the NEPA guidelines regarding unavailable information. See 40 CFR § 1502.22.

#### 4.10 Impact Analysis for Cultural Resources

Oil and gas exploration and development has the potential to adversely impact cultural resources on the Monument. The DEIS states that future proposals would “be processed in a manner to avoid impact to cultural and traditional cultural properties through implementation of the BLM/SHPO State Protocol and compliance with Section 106 of the NHPA.” DEIS at 4-189. Additional language should be included in the DEIS to comply with NEPA regulations regarding incorporation by reference. See 40 C.F.R. § 1502.21. It should also contain a discussion about whether the State Protocol has sufficiently protected such sites from existing oil and gas exploration and development.

#### 4.11 Impact Analysis for Visual Resources

The DEIS states that seismic lines for oil and gas exploration in the valley floor “would result in minor to moderate temporary impacts to visual resource values and would only be visible until the first growing season after the disturbance (tire tracks and flattened vegetation where cross-country ATV use occurs).” DEIS at 4-209. The DEIS provides no citation for the proposition that tire tracks would disappear in only one growing season. In fact, in arid landscapes like the Monument, tire tracks and other ground disturbance is still visible many years, sometimes even decades, after the disturbance occurs.

The duration of off-road tire tracks will last even longer if such areas encourage unauthorized ORV users to travel off road, as mentioned in the DEIS. DEIS at 4-254. The DEIS must evaluate the additional impacts from this unauthorized travel, and must also propose mitigation measures to reduce or eliminate the likelihood of off-road travel.

#### 4.16 Impact Analysis for Minerals

The DEIS describes several assumptions used for the analysis. One of these assumptions is that “most of the lands with potential for oil and gas resources are in areas where BLM owns the surface.” DEIS at 4-259. The DEIS should include the data that BLM used to arrive at this assumption.

The DEIS also describes “incomplete information” on which the BLM was unable to rely in preparing the analysis. First, BLM states that the “total acreage already disturbed due to existing oil and gas operations is unknown.” This is basic information that should be readily available to BLM, and is useful for baseline data as well as the impacts analysis. This incomplete information must comply with the NEPA regulations for incomplete information at 40 C.F.R. § 1502.22.

The DEIS contains contradictory estimates on the monthly volume of oil produced in the Monument. Page 4-261 states that 1,200 to 1,500 barrels of oil are produced in the Monument each month, while page 4-288 states that the figure is 2,000 barrels of oil per month. These figures should be consistent throughout the EIS.

Section 4.16.3.1 (Impacts on Minerals from Implementing the Minerals Program) discusses existing and expected levels of oil exploration and development on the Valley Floor Area, the Russell Ranch Unit Area, and the Morales Canyon Field. DEIS at 4-260 to 4-262. This section should also briefly discuss the Taylor Canyon area. While Taylor Canyon may not currently be a producing field, the acreage of existing disturbance and any reasonably foreseeable future development should be noted in the DEIS.

This section also repeats the statement in section 4.11 above that vehicles traveling off-road for oil exploration will cause only “transient” disturbance that will disappear after a growing season. Specifically, this section states, “Within several months, or one rainy season, it would be difficult to view the disturbance.” DEIS at 4-263. In arid regions like the Monument, tire tracks and other ground disturbance can take several years, or even decades, to disappear.

Finally, the language used in this section should mirror that used in the RMP goals and objectives outlined in Section 2.19. For example, the DEIS states that “operators would be encouraged to place multiple wells on single well pads where feasible, and production pipelines would be required to follow existing roads.” DEIS at 4-263. However, Section 2.19 (and the BMPs in Appendix P) only requires that pipelines follow existing roads “when feasible.” The DEIS must analyze the impacts caused by placing pipelines off existing roads in those circumstances when placing them on the road may not “feasible.” In the alternative, Section 2.19 and the Appendix P BMPs could contain a strict requirement stating that pipelines must follow existing roads, without exception. In addition, neither the Section 2.19 nor the Appendix P BMPs contain any language about encouraging operators to place multiple wells on single well pads where feasible. Because the DEIS admits that “wells would potentially be too shallow and too widespread for multiple wells to be drilled from a single pad,” the DEIS should also evaluate the impacts of needing to construct multiple pads. Other language used in this section of the DEIS should correlate with the language used in Section 2.19 and the BMPs in Appendix P.

**V. Conclusion**

Thank you for considering our comments and suggestions, and we appreciate the work the BLM has undertaken to prepare this RMP/EIS. Please contact me if you would like to discuss them further, and we look forward to reviewing the final RMP/EIS and working with the BLM to protect the Carrizo Plain National Monument.

Sincerely,

/s/

Jeff Kuyper  
Executive Director