November 17, 2017

Randal Porter  
Bureau of Land Management  
Ridgecrest Field Office  
300 S. Richmond Rd.  
Ridgecrest, CA  93555

sent via electronic mail to rporter@blm.gov

RE:  NEPA Register# DOI-BLM-CA-D050-2017-0037-EA (Perdito Exploration Project)

Dear Mr. Porter:

On behalf of our thousands of members and supporters, Friends of The Inyo (FOI), the California Wilderness Coalition (CalWild), the Sierra Club, the Amargosa Conservancy and the Wilderness Society (TWS) submit these comments in response to the Bureau of Land Management’s (BLM) request for public input on the Perdito Exploration Project Environmental Assessment (EA). Our organization’s members and supporters include residents of Inyo County and active participants in the abundant recreational opportunities in the area that may be directly and indirectly impacted by the proposed Perdito Exploration Project.

FOI is a grassroots nonprofit conservation organization based in Bishop, California, dedicated to the stewardship, exploration and preservation of the Eastern Sierra’s public lands and wildlife. Over our 30-year history, FOI has become an active partner with federal land management agencies including the BLM. CalWild is a nonprofit public benefit corporation organized under the laws of the State of California in 1976 and composed of conservation organizations, businesses and individual members. Through advocacy and public education, CalWild builds support for the protection of California’s wildest remaining places, primarily those managed by the federal government. The Sierra Club was founded by legendary conservationist John Muir in 1892 and is now the nation’s largest grassroots environmental organization – with more than two million members and supporters including nearly 450 in the Eastern Sierra. In Inyo and Mono Counties, CA the Sierra Club Range of Light Group is a member of the Toiyabe Chapter of the Sierra Club and offers outings and advocates for public lands and environmental protection on a
wide range of issues with 400 members across both Counties. The Amargosa Conservancy works to serve the wilds, waters, and communities of the Amargosa Basin and Eastern Mojave. With a focus on science, stewardship, and education, the AC strives to protect these remote and wild places, preserving the unique ecology and hydrogeology of the region. TWS is a national non-profit organization with 700,000 members and supporters nationwide whose mission is to protect wilderness and inspire Americans to care for our wild places. Since it’s founding in 1935, TWS has worked to provide scientific, legal, and policy guidance to land managers, communities, local groups, state and federal decision-makers, and diverse interests who care about our American public lands.

Our organizations offer the following comments in regards to the Perdito Exploration Project EA. As written in the Perdito Exploration Project EA, “the Federal Land Policy and Management Act (FLPMA) of 1976 states that it is the policy of the United States to manage the public lands for multiple-use and sustained yield while providing for resource protection in a manner that also recognizes the nation’s need for domestic sources of minerals, provides rights of ingress and egress to locators under the Mining Law of 1872, and mandates the Secretary of the Interior to prevent unnecessary or undue degradation of public lands.”

BLM’s multiple-use mandate prohibits the agency from managing public lands primarily for resource development or in a manner that unduly or unnecessarily degrades other uses. See, 43 U.S.C. § 1732(a). The multiple-use mandate directs BLM to achieve “a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations.” 43 U.S.C. § 1702(c). Further, as co-equal, principal uses of public lands, outdoor recreation, fish and wildlife, grazing, logging and rights-of-way must receive the same consideration as resource development. 43 U.S.C. § 1702(l).

In recognition of the environmental components of the multiple-use mandate, courts have repeatedly held that under FLPMA’s multiple-use mandate, development of public lands is not required, but must instead be weighed against other possible uses, including conservation to protect environmental values. See, New Mexico ex rel. Richardson, 565 F.3d at 710 (“BLM’s obligation to manage for multiple-use does not mean that development must be allowed. . .. Development is a possible use, which BLM must weigh against other possible uses — including conservation to protect environmental values, which are best assessed through the NEPA process.”); Rocky Mtn. Oil & Gas Ass’n v. Watt, 696 F.2d 734, 738 n.4 (10th Cir. 1982) (“BLM need not permit all resource uses on a given parcel of land.”). Thus, any action by BLM that seeks to establish resource development as the dominant use of public lands would violate FLMPA.

Our organizations would like to emphasize that FLPMA’s multiple-use mandate does not permit the prioritization of mineral development over other uses of public lands. The other resources and uses of the project site must be given full and equal consideration in the BLM’s decision making for the Perdito Exploration Project.

Opposition to the Perdito Exploration Project
As discussed in more detail below, our organizations are opposed to the Perdito Exploration Project. The project site is located in and in close proximity to a number of sensitive areas that require special management provisions. The impacts of exploration are in conflict with many of these management prescriptions, and it is unclear if and how any future mine development proposal would be allowed given these prescriptions. Further, exploration and potential future mine development would impact the resource values that bring valuable travel and recreation jobs and revenue to Inyo County. The potential economic gain from mining in Inyo County is minor compared to the travel and recreation industry which is dependent on the preservation of undisturbed public lands.

Perdito Exploration Project Impacts

The Perdito Exploration Project site is situated in an unroaded, undeveloped, wild, and rugged landscape protected by a variety of special designations and therefore is not a suitable location for industrial type activities such as mineral exploration and future mining. The project is located approximately one-half mile north of the Malpais Wilderness Area, four miles south of the Cerro Gordo Wilderness Study Area, seven miles south of the Inyo Mountains Wilderness Area, and four miles west of Death Valley National Park.

National Landscape Conservation System - The project is located on lands classified as being within the National Landscape Conservation System (NLCS) (Basin and Range Ecoregion Subarea). The establishment of the NLCS represents the cornerstone of a new era in land stewardship, in which BLM focuses on a mission of stewardship to: “conserve, protect, and restore these nationally significant landscapes that have outstanding cultural, ecological, and scientific values for the benefit of current and future generations.” 16 U.S.C. § 7202 (2009). Secretarial Order 3308 speaks to the management of the NLCS stating in pertinent part that the BLM “shall ensure that the components of the NLCS are managed to protect the values for which they were designated, including, where appropriate, prohibiting uses that are in conflict with those values.” Importantly, the BLM policy manual for the NLCS generally provides additional guidance for NLCS units and valid existing rights stating that the BLM “will work with holders of valid existing rights to mitigate, to the greatest extent possible, impacts to the values for which each NLCS unit was designated and encourage the use of innovative low-impact implementation and restoration techniques.” BLM Manual 6100, Section 1.6(H)(1).

Areas of Critical Environmental Concern – The project is partially located on lands designated as an Area of Critical Environmental Concern (ACEC). FLPMA obligates the BLM to “give priority to the designation and protection of areas of critical environmental concern [ACECs].” 43 U.S.C. § 1712(c)(3) (emphasis added). ACECs are areas “where special management is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes.” 43 U.S.C. § 1702(a).
The Cerro Gordo-Conglomerate Mesa ACEC overlaps with the northern end of the project. The management goal of the Cerro Gordo-Conglomerate Mesa ACEC is to provide protection to cultural resources, rare plant and animal species, and wildlife habitat (Cerro Gordo Conglomerate Mesa Special Unit Management Plan, Basin and Range Subregion, DRECP Appendix B). In accordance with the Conservation Management Actions (CMA) in the Desert Renewable Energy Conservation Plan (DRECP), development on NLCS lands and ACEC lands is limited by a total ground disturbance cap (CMA NLCS-DIST-2 and CMA ACEC-DIST-2) which for this location have already been exceeded\(^1\) triggering the need for compensatory mitigation for the ground disturbance associated with the proposed project (at a ratio of 3:1; EA Section 1.6).

Wilderness Characteristics - The project is also located within the California Desert Conservation Area (CDCA) Wilderness Inventory Unit (WIU) #124 (Conglomerate Mesa). A 1979 inventory conducted by the BLM on the Cerro Gordo Peak area, which consisted of more than 60,000 acres, found an unspecified number of acres that did not meet wilderness criteria because of extensive mining activity. These acres included lands at the northern end of the unit in the vicinity of Cerro Gordo Peak and mining areas along Highway 136. The remainder of the unit was found to be natural and to have superlative wilderness character.

In 1994, the California Desert Protection Act (CDPA) established the 31,960-acre Malpais Mesa Wilderness, and included part of the Santa Rosa Hills (the eastern slopes) in the expansion of Death Valley National Park. In 2015, BLM inventoried the remaining portions of the original WIU, which are south, west and north of the Malpais Mesa Wilderness. These portions were subdivided into units that had or did not have wilderness character. Most of the original areas excluded in the 1979 inventory were found not to have wilderness character for the reasons previously described. The 2015 inventory found the following subunits to have wilderness character: approximately 22,500 acres (also contiguous to the Malpais Mesa Wilderness) in subunit 124-1; approximately 5,632 acres in subunit 124-2; approximately 8,963 acres in subunit 124-3; approximately 1,236 acres contiguous to the Malpais Mesa Wilderness in subunit 124-4; approximately 107.5 contiguous acres in subunit 124-5; approximately 1,327.5 contiguous acres in subunit 124-6; approximately 1,367 contiguous acres in subunit 124-7; and approximately 322 contiguous acres in 124-8.

The 2015 inventory found that the aforementioned subunits meet the wilderness criteria for natural condition, outstanding opportunities for solitude, outstanding opportunities for primitive and unconfined recreation, and supplemental values including plant and animal species and cultural resources. The exploration activities associated with the Perdito Project will have a negative impact on these values through ground disturbance, the presence of equipment, noise, and increased human activity. In particular, the outstanding opportunities for solitude will be virtually non-existent during the entire project.

\(^1\) The ACEC disturbance cap is 0.1% and the existing disturbance is 0.22% and the CDNCL disturbance cap is 1.0% and the existing disturbance is 1.29%.
LUPA BIO-PLANT CMAs - The DRECP LUPA CMAs for special status species are legal requirements for how the BLM is to manage for sensitive and rare species in the LUPA decision area which includes Conglomerate Mesa. Our organizations are very concerned about how this project could be precedent setting for the DRECP LUPA CMAs. In its current form the project does not comply with LUPA CMAs BIO-PLANT-2 or BIO-PLANT-3.

Regarding BIO-PLANT-2, locations of *Perityle inyoensis* (*P. inyoensis*), a BLM special status species, occur within 0.25 mile of the BLM Preferred Alternative’s helicopter water pump station, Drill Hole 7, Drill Hole 6, Drill Hole 2, and Drill Hole 1. For this reason, BIO-PLANT-2 directly applies: “Implement an avoidance setback of 0.25 mile for all Focus and BLM Special Status Species occurrences. Setbacks will be placed strategically adjacent to occurrences to protect ecological processes necessary to support the plant species” (see Appendix Q, Baseline Biology Report, in the Proposed LUPA and Final EIS [2015], or the most recent data and modeling). DRECP LUPA Final, September 2016. p.110.

The project does not propose to meet the 0.25-mile avoidance setback for *P. inyoensis* and, to the contrary, indicates that the access route will crush some individual plants that have reestablished and will disturb some of the soil layer (EA Section 4.14.1). This appears to be in conflict with the general regulatory performance standards that apply to mine operators (43 CFR 3809.420(a)):

> Consistent with the mining laws, operations and post-mining land use must comply with the applicable BLM land-use plans and activity plans, and with coastal zone management plans under 16 U.S.C. 1451, as appropriate.

This also is in conflict with FLPMA, which requires that the BLM manage areas pursuant to land use plans, such that once a resource management plan is completed, FLPMA requires that “all future resource management authorizations and actions . . . and subsequent more detailed or specific planning shall conform to the approved plan.” 43 C.F.R. § 1610.5-3. The FLPMA regulations further define “conformity” to mean “that a resource management action shall be specifically provided for in the plan, or if not specifically mentioned, shall be clearly consistent with the terms, conditions, and decisions of the approved plan or plan amendment.” 43 C.F.R. § 1601.0-5(b).\(^2\)

\(^{2}\) In *Norton v. SUWA*, the Supreme Court elaborated on these two obligations: The statutory directive that BLM manage “in accordance with” land use plans, and the regulatory requirement that authorizations and actions “conform to” those plans, prevent BLM from taking actions inconsistent with the provisions of a land use plan. Unless and until the plan is amended, such actions can be set aside as contrary to law pursuant to 5 U.S.C. § 706(2). 542 U.S. 55 at 69.
The logic provided in the EA that the proposed action is consistent with the BLM Special Status Species Manual (6840) and meets the requirements of the mining law regulations with regard to unnecessary or undue degradation while informative, does not justify the dismissal of the DRECP CMAs. The DRECP, as the applicable land use plan, went through rigorous, multi-stakeholder scrutiny and full NEPA review and approval and should not be disregarded during project level analyses. In accordance with the DRECP Record of Decision (ROD), while flexibility is provided in the implementation of the CMAs, there is a process that must be followed and analysis that is necessary (DRECP ROD, p 63); it is not clear from the EA that this process has been followed:

In connection with the review of a particular activity, the BLM will determine, on a case-by-case basis, which CMAs apply to any given activity based on its location and the resources present there. At the outset, it should be noted that each CMA applies to actions that may impact the resource for which the CMA was developed. However, the BLM recognizes that with changing science and technology, there may be alternative methods to meet the purpose and objectives of the CMAs. As part of subsequent project-specific NEPA analyses, a project proponent may be able to propose alternative methods for compliance with a particular CMA. The BLM California State Director will review such requests, in collaboration with USFWS, CEC, and CDFW, and may analyze, as appropriate, whether any proposed alternative approach or design feature to avoid, minimize, or mitigate impacts: (1) meets the goals and objectives for which the CMA was established, (2) and provides for a similar or lesser environmental impacts. Such alternate methods would be addressed as part of any subsequent project-specific approvals.

Secondly, the EA acknowledges in each alternative that the proposed project will impact locations of *P. inyoensis*, a BLM special status species. BIO-PLANT-3 specifies that impacts to special status plants must be capped at 1% of their suitable habitat throughout the DRECP decision area: “Impacts to suitable habitat for Focus and BLM Special Status plant species should be avoided to the extent feasible, and are limited [capped] to a maximum of 1% of their suitable habitat throughout the entire LUPA Decision Area. The baseline condition for measuring suitable habitat is the DRECP modeled suitable habitat for these species utilized in the EIS analysis (2014 and 2015), or the most recent suitable habitat modeling.” DRECP LUPA Final, September 2016. p.110.

A habitat suitability model for this species was not generated as part of the DRECP Environmental Impact Statement analysis, and there does not appear to be a published habitat model for *P. inyoensis*. To comply with BIO-PLANT-3, a suitable habitat model must be developed in order to establish a baseline for calculating the percent of *P. inyoensis* suitable habitat that would be affected under each project alternative, and to track additional impacts should others occur in the future. Approval of a Perdito alternative other than the no-action alternative prior to this evaluation would not comply with BIO-PLANT-3.
Joshua Tree Woodland Habitat - Conglomerate Mesa is an extremely important Joshua tree woodland habitat where the *Yucca brevifolia* population is exhibiting vigorous regeneration. Joshua tree individuals 40cm or less in height, which generally correspond to 10-15 years growth³, occur in great numbers throughout this transitional margin between the Mojave and Great Basin Desert ecoregions. By that estimate, over the past few decades Conglomerate Mesa Joshua trees have been generating young, new individuals during the same period that Joshua trees elsewhere throughout its range are not. Rather, Joshua tree habitat in lower elevations are contracting across its range, generating an urgency to research the genomic and demographic characteristics of this iconic desert species and elevating conservation attention for it.

As described, the Perdito Exploration Project is in direct conflict with several desert regional plans that have selected *Yucca brevifolia* as a conservation focal species, placing highest conservation value on areas of Joshua tree transitional habitat. Conglomerate Mesa has become increasingly important for Joshua tree recruitment and survival as climate change further effects desert landscapes and eliminates Joshua tree recruitment opportunities at lower elevations. These and other ecologically significant lands harboring Joshua tree regeneration must be conserved to ensure the highest possible chance for long-term viability of this iconic desert species.

The DRECP acknowledges the Joshua tree woodlands on Conglomerate Mesa:

> The [Conglomerate Mesa] ACEC has a unique assemblage of plant communities since it lies at the eastern edge of the Mojave Desert and the western edge of the Great Basin. The area supports creosote scrub and silver cholla, Joshua tree and pinyon–juniper woodlands, as well as sagebrush ecosystems. DRECP LUPA Final, September 2016. Appendix B – Basin & Range Subregion, p. 12.

and includes the conservation of Joshua tree as a specific management objective for the Conglomerate Mesa ACEC:


The DRECP also acknowledges the extraordinary importance of conserving Joshua tree woodlands by designating this community as a DRECP special vegetation feature and establishing CMAs for it:

> **LUPA-BIO-SVF-1:** For activity-specific NEPA analysis, a map delineating potential sites and habitat assessment of the following special vegetation features is required: Yucca

---

³ Barrows et al. (2012), p. 35.
clones, creosote rings, Saguaro cactus, Joshua tree woodland, microphyll woodland, Crucifixion thorn stands. BLM guidelines for mapping/surveying cactus, yuccas, and succulents shall be followed. DRECP LUPA Final, September 2016. p.110.

**LUPA-BIO-SVF-5:** Joshua tree woodland (Yucca brevifolia Woodland Alliance): impacts to Joshua tree woodlands will be avoided to the maximum extent practicable, except for minor incursions. DRECP LUPA Final, September 2016. p.111.

It appears that LUPA-BIO-SVF-1 requires the mapping of the Joshua tree woodlands in the proposed project area, and a habitat assessment of the same, neither of which appear to have been completed as part of the EA. Therefore, the impacts to this conservation focal species from the proposed exploration project, while expected, have not been adequately assessed.

*Feasibility of a Future Open-Pit, Cyanide Heap-Leach Gold Mine*

While impacts from the proposed exploration activities may be designed to avoid and/or minimize impacts to resource values in these sensitive areas, it is unclear how a future mine development proposal would be permissable. If a future mine development project is a non-starter, our organizations strongly encourage the BLM to consider foregoing any further exploration activities on this site.

According to the Inyo County Associate Planner/Mineral Examiner (phone conversation Nov 8, 2017, Inyo County Associate Planner) and a press release issued by the project applicant (Silver Standard Resources Inc., Mar 31, 2016), exploration in this area is focused on Carlin-type gold deposits (it is also noted that this information was not included in the EA itself; see EA Specific Comments below). It is expected that a positive discovery of Carlin-type gold would lead to a future proposal for an open-pit, cyanide heap-leach mine and as stated in Silver Standards press release would leverage their “in-house expertise on similar deposits and run-of-mine heap-leach operations.” Based on our review of similar mines, including Silver Standard’s Marigold Mine in Nevada (http://www.ssrmining.com/operations/production/marigold/), open-pit, cyanide heap-leach mine operations involve substantial ground disturbance, soil movement, visual change, chemical use (cyanide, mercury), water use, personnel, heavy equipment, and onsite facilities (see photos in Attachment 1). Future development of this character in this location will be very challenging to accommodate.

For example, the operation would have to conform with the NLCS and ACEC disturbance caps (CMA NLCS-DIST-2 and CMA ACEC-DIST-2) which are already exceeded leading to significant compensatory mitigation requirements at a likely ratio of 3:1 as with the exploration activities. The operation would also need to be managed in accordance with Visual Resource Management (VRM) Class II objectives (EA Section 3.13) which include retaining the existing character of the landscape with a low level of change to the characteristic landscape. This would mean the development of an open-pit gold mine that does not attract the attention of the casual observer. Further, given that the site overlaps with the Cerro Gordo Conglomerate Mesa ACEC,
the operation would also have to be assessed to determine whether it could be accommodated within the ACEC and its management goals many of which are in conflict with a major ground disturbing activity (Cerro Gordo Conglomerate Mesa Special Unit Management Plan, Basin and Range Subregion, DRECP Appendix B). These goals include but are not limited to:

- Minimize soil disturbance and prevent accelerated erosion caused by human activities;
- Protect the quantity and quality of existing water resources, protect groundwater from contamination;
- Protect rare plants species and sensitive vegetation communities;
- Retain the existing character of landscape and VRM Class II designation; and
- Provide recreation opportunities for the enjoyment of the area that are consistent with resource protection.

Any future mining operation would also be constructed on lands with wilderness characteristics. Mitigation is required for inventoried lands found to have wilderness characteristics, but not managed for those characteristics, if the wilderness characteristics are directly impacted (CMA LUPA-WC-3). It is expected that an open-pit gold mine operation would directly impact the criteria for natural condition, outstanding opportunities for solitude, outstanding opportunities for primitive and unconfined recreation in this area, and supplemental values for plant and animal species and therefore require substantial compensatory mitigation.

Other impacts associated with an open-pit, cyanide heap-leach gold that will be difficult, if not impossible, to sufficiently address include Native American concerns, noise (including potential for use of blasting), vegetation impacts, dust, waste, water use, and chemical use. Much of the gold mined in open-pits is found in sulfur-bearing rocks. These rocks, when disrupted by mining, can produce acid mine drainage, a problem that often needs active treatment forever. In addition, many small mines use mercury for the separation of gold, while large mines instead use cyanide (http://www.groundtruthtrekking.org/Issues/MetalsMining/GoldMiningMethods.html). Both chemicals are very toxic. Further, only a tiny fraction of the ore obtained through open-pit mining consists of gold and the rest must be discarded. According to information published by one gold company, it takes anywhere from 2 tons to 91 tons of rock to produce just 1 ounce of gold (http://www.businessinsider.com/tons-of-rock-for-an-ounce-of-gold-2013-4). This area is expected to contain “low grade gold ore” that would produce less than a half an ounce of gold from each ton of rock (Inyo Register Article, Oct 31, 2017).

In addition, for gold heap-leach operations water, which is a scare commodity in the Conglomerate Mesa area, is an important component of operations. Water is required for drilling and dust suppression during mining, for agglomeration and as leachate during ore processing, to support the workforce (requires water in potable form and for sanitation), for mine site reclamation, and to compensate for water lost to evaporation and leakage (Estimated Water Requirements for Gold Heap-Leach Operations, USGS Open-File Report 2012–1085). Also, as discussed above, LUPA-BIO-SVF-5 requires impacts to Joshua tree woodlands be avoided to the
maximum extent practicable, except for minor incursions; clearly any future open-pit mining operation on the project site would not be considered a minor incursion.

In accordance with the California State Mining and Reclamation Act of 1975 (SMARA), any future mining operation on this site would be required to obtain approval of a permit to mine, a reclamation plan, and financial assurances from the Inyo County Planning Commission (http://www.inyoplanning.org/smara/smaraord.htm). It is the intent of SMARA that completed mine sites present no additional dangers to the public health and safety, and that the mined lands are returned to an alternate, useful condition. Successful implementation of a reclamation plan in accordance with SMARA is of great concern to our organizations given the findings by the California’s State Mining and Geology Board (Board) (State Mining and Geology Board’s Report on Backfilling of Open-Pit Metallic Mines in California, Information Report 2007-02).

In 2003, the Board evaluated reclamation of open-pit metallic mines in the state and with few exceptions, it was determined that open-pits were not being returned to the conditions contemplated by SMARA. Generally, these pits were left in the final mining configuration with few efforts to backfill or reclaim them to a beneficial end use. Based on these findings, the Board set forth regulations for the backfilling of open-pit metallic mines. The need for such regulation reflected several issues. Open-pit metallic mineral mines often create very large excavations with large overburden and rock waste piles, as much as 40 percent greater in volume than the pit the material came from. In addition, mines that employ the cyanide heap-leach method for mineral segregation and collection frequently generate very large leach piles. These features remain on the landscape following the conclusion of mining operations, and even reclaimed sites have been shown to pose adverse soil and groundwater contamination conditions. Oversight and enforcement of reclamation efforts in accordance with SMARA for any future mining activity on the site will be a crucial role for the County and BLM.

**Economic Considerations** - Our organizations believe that the impacts associated with future mineral development in this location far outweigh any potential economic gain and in fact could adversely affect the travel and recreation industry that Inyo County so heavily depends on. Inyo County is steeped in natural resources and outdoor recreation opportunities. Federal Lands including lands managed by the BLM, US Forest Service, and National Park Service make up approximately 92% of Inyo County (Economic Profile System⁴). Major tourist and recreation drivers include Death Valley National Park, Mount Whitney, Alabama Hills, and the Ancient Bristlecone Pine Forest. The County’s own webpage describes Inyo as “the adventure capital of the world” and touts “stillness and peace,” “striking beauty,” and the abundant provision of “professional services and equipment” for outdoor excursions as its biggest selling points (http://www.inyocounty.us/). We agree.

---

⁴ https://headwaterseconomics.org/tools/economic-profile-system/
In 2015, 1,911 or 36% of the 5,309 jobs in Inyo County were in the travel and tourism industry, which includes recreation (Economic Profile System). These are stable jobs that are filled by local residents. Revenues generated by the Transient Occupancy Tax, reflecting travel and tourism in the region, totaled $3.4 million in 2016 (Inyo County Auditor, phone conversation Nov 2, 2017). It is also worth noting that Payments in Lieu of Taxes (PILT), which compensate the County government for non-taxable Federal lands within their borders, totaled nearly $1.79 million in 2015 (Economic Profile System).

In contrast, there are currently 71 active subsurface mine operations in Inyo County, two of which are gold mine operations (Inyo County Associate Planner, personal communication, Nov 8, 2017) that in 2015 accounted for 178 or 3.4% of the 5,309 jobs in the County (100 or 1.9% of those were metal ore mine jobs). Taxes generated by mining were estimated at a mere $300,000 in 2017 (Inyo County Board of Supervisors, email communication, Nov 13, 2017). Not only is mining a very small portion of the economy in Inyo County, it appears to be a fairly volatile industry that is heavily dependent on outside market conditions. Metal ore jobs spiked in 2011 to 160 jobs and dropped in 2015 to 100; non-metal ore jobs peaked at 100 in 1998, dropped below 20 in 2012, and then went back to 80 in 2013. As an example, the Briggs Mine, a conventional open-pit, heap-leach operation near Death Valley National Park, ceased mining and leaching in July 2015 due to uneconomic conditions (http://www.bakersfield.com/news). It is also worth noting that in 2015, no Mineral Leasing Act payments were made to the County and Federal Mineral Royalties which totaled $160,205 were all attributed to geothermal activities (Economic Profile System).

These conclusions regarding the mining industry’s contribution to the overall economy in the desert region of California and volatility are reaffirmed in the report titled “The California Desert Conservation and Recreation Act of 2015: Impacts on Mining and the Regional Economy (The Sonoran Institute, October 2015). The report states that mining’s contribution to overall labor-related income is small in the desert region counties and that even when direct, indirect, and induced impacts on Gross Domestic Product (GDP) are considered, the contribution to nominal GDP from mining was only estimated between 0.04% and 4.12% in 2014. The report points out that metals mining, such as gold, is influenced primarily by global demand and prices determined in global markets such that when global prices increase, mining for metals increases and when global demand wanes and prices decrease, mineral exploration and mining slows down or stops. The report concludes:

“Mining’s contribution to the California Desert’s economy is overshadowed by growth in other economic sectors that track closely with economic trends throughout the interior West. These trends reflect the increasing importance of regional amenities, notably natural and cultural attractions, and are defined by growth in services, professional, and government sectors, and non-labor income. These trends also have profound implications for the economic role of public lands, where protected public lands become an important economic asset. Tourism and recreation remains one of the bright spots of the region’s
Our organizations strongly urge the BLM to consider denying exploration activities on the proposed site given the impacts associated with exploration, the unlikely path forward for development of an open-pit, cyanide heap-leach mine in this location, and the potential for exploration and mining activities to negatively impact the economy of Inyo County which is dependent on the natural environment in this region.

**BLM Preferred Helicopter Access Alternative**

For all of the important resource concerns discussed throughout this letter, our organizations appreciate the BLM’s thoughtful inclusion of the Helicopter Access Alternative in the Perdito Exploration Project EA. This alternative is responsive to concerns about ground disturbance associated with the proposed exploration activities, reducing impacts and mitigation requirements from 7.75 acres and 23.25 acres to 0.2 acres and 0.6 acres respectively, as compared to the applicant’s proposed action. This substantially reduced footprint will minimize impacts to biological resources as well as visual resources. Based on the reasons stated above, our organizations are not supportive of further mineral exploration on this site, however if the BLM decides to move forward with this project, we believe the BLM’s Preferred Helicopter Access Alternative is the only action alternative that can be permitted in this location.

In terms of the implementation of the Helicopter Access Alternative, our organizations offer the following comments. The 0.6 acres of mitigation must occur within the management unit within which it occurs. It will be helpful for the EA and Decision Record to include a breakdown of acres of mitigation by management unit so it is clear what mitigation needs to occur where. Our organizations are very familiar with the landscape in this area and offer to assist the BLM as they consider mitigation opportunities associated with this project. At a minimum, we suggest that BLM should mitigate with in-kind in the vicinity of NE Mojave through either acquiring private land and/or elevating protective designations on BLM land. As stated in the EA, ground disturbance mitigation is required to be completed within 12 months of disturbance (EA Section 1.6). Our organizations would like to understand how this 12-month requirement will be enforced by the BLM and what consequences there are if mitigation is not completed in this timeframe.

In addition to mitigation, the applicant will have a responsibility to reclaim the areas disturbed by the exploration activities. Since, as discussed in the EA (EA Section 4.15.1.1), previous reclamation and revegetation activities on this site used seed mix that did not match the surrounding dominant vegetation types, it will be important for the BLM to closely monitor all reclamation and revegetation work. Furthermore, we recommend the Ridgecrest Field Office follow the example of the Bishop Field Office’s restoration work where only native, locally sourced seed is used. It is our understanding that reclamation of the previous BHP routes took approximately 3 years to complete. We request that the BLM hold the applicant to a much
shorter timeline for reclamation for this project (i.e., 12 months or less). We also recommend that the timing of mitigation and reclamation work be done outside of limited operating periods for wildlife species possibly impacted by mitigation and reclamation activities. Finally, the EA does not mention bonding; please indicate if bonding is required as part of this exploration project.

**EA Specific Comments**

Our organizations believe revisions to the EA are necessary prior to a Decision Record as outlined below.

**Transparency and Public Disclosure** - Our organizations note that the Perdito Exploration Project EA does not inform the public what mineral(s) are being explored for or what the likely next step(s) would be if a positive finding was to occur (even though the applicant’s own press release on the project was very forthcoming about exploring for Carlin-type gold deposits and the potential to leverage their in-house expertise on mine heap-leach operations; Silver Standard Resources Inc., March 31, 2017).

In order to provide adequate public disclosure and transparency with respect to the proposed exploration project, the BLM should include as part of the EA a discussion of potential future actions that may occur on the site following exploration. It is also important for the public to understand the future permitting and approval processes that a development project on this site would need to go through (including any discretionary approval authority of Inyo County). If it is not possible to provide specifics at this time, at a minimum, the BLM should provide a range of potential future outcomes for the public’s consideration. Without an understanding that exploration is a step in a sequential process that could end with an open-pit, cyanide heap-leach mine, we believe the information provided in the EA is misleading to the local community.

**Cumulative Effects** - The EA describes reasonably foreseeable future actions for all cumulative effected study areas generally to include ongoing and new mineral exploration, geophysical research, recreation, transportation, ROW development, wildlife use and management, and livestock grazing (EA Section 4.4.5). This generic description of reasonably foreseeable future actions is not consistent with the requirements of the National Environmental Policy Act (NEPA) (40 CFR 1508.7) or the BLM NEPA Handbook (H-1790, Section 6.8.3.4).

NEPA regulations define “cumulative impact” as:

> the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. 40 C.F.R. § 1508.7 (emphasis added).
To satisfy NEPA’s hard look requirement, the cumulative impacts assessment must do two things. First, BLM must catalogue the past, present, and reasonably foreseeable projects in the area that might impact the environment. *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 809–10 (9th Cir. 1999). Second, BLM must analyze these impacts in light of the proposed action. If BLM determines that certain actions are not relevant to the cumulative impacts analysis, it must “demonstrat[e] the scientific basis for this assertion.” *Sierra Club v. Bosworth*, 199 F.Supp.2d 971, 983 (N.D. Ca. 2002). A failure to include a cumulative impact analysis of actions within a larger region will render NEPA analysis insufficient. See, e.g., *Kern v. U.S. Bureau of Land Management*, 284 F.3d 1062, 1078 (9th Cir. 2002) (analysis of root fungus on cedar timber sales was necessary for an entire area).

As stated, reasonably foreseeable future actions are those for which there are existing decisions, funding, formal proposals, or which are highly probable, based on known opportunities or trends. In order to provide an adequate cumulative effects analysis in the EA, the BLM must describe and analyze specific actions in the cumulative effect study areas including, but not limited to:

- Existing proposals, such as the submission of permit applications
- Commitment of resources, such as funding
- Federal actions where the NEPA process begun (for example, publication of a Notice of Intent)

**LUPA BIO-PLANT CMAs** - As discussed extensively above, in its current form the project does not comply with LUPA CMAs BIO-PLANT-2 or BIO-PLANT-3. This inadequacy must be addressed in the EA. This includes, but is not limited to, incorporation of project design measures to address the 0.25 miles avoidance setback requirements of BIO-PLANT-2 and the development of a suitable habitat model to establish a baseline for *P. inyoensis* to comply with BIO-PLANT-3.

**Joshua Tree Woodland Habitat** – As elaborated above, LUPA-BIO-SVF-1 requires the mapping of the Joshua tree woodlands in the proposed project area, and a habitat assessment of the same, neither of which appear to have been completed as part of the EA. Therefore, the impacts to this conservation focal species from the proposed exploration project have not been adequately assessed. This deficiency should be corrected in the EA.

**Water Use and Impacts** - The EA states that during drilling, 500 to 1,000 gallons of water would be used each day and that recirculation of water would be done when possible (EA Section 2.3.3). It goes on to say that water remaining in tanks or trucks would be drained onto the land surface in such a way as to prevent rilling and erosion at the cessation of drilling (EA Section 2.8.4). The EA should provide an estimate (or range) of the amount of water that will be drained onto the land surface since it is not apparent from the information provided. In addition, it is not clear if the 500 to 1,000 gallons of water to be used each day is inclusive of the dust control required under the Proposed Action and Minimum Road Construction Alternatives. Please include a discussion of amount of water needed for dust control in the EA and any differences
among the alternatives. Finally, the EA does not disclose the location or source of the water that will be used for the exploration activities. The water source and any direct, indirect or cumulative impacts from its use should be incorporated into the EA.

**Hazardous Materials** - The EA states that an emergency spill response plan would be prepared in accordance with CMA LUPA-SW-7 and materials and spills would be handled in accordance with CMA LUPA-SW-6 (EA Section 2.8.4). The EA however does not include a list of hazardous substances to be used or present on the site that would be addressed in the spill response plan. The BLM should describe as part of the EA the substances present of the site and part of the exploration activities and any differences among the alternatives.

**ACEC Analysis** - The EA does not conclude whether the Perdito Exploration Project can or cannot be accommodated within the Cerro Gordo-Conglomerate Mesa ACEC and its management goals (EA Section 4.5). Instead, the BLM has chosen to evaluate management actions under each applicable resource in subsequent analysis sections. Nowhere in the EA does the BLM comprehensively list all of the ACEC management goals and a conclusion regarding whether the Perdito Exploration Project can be accommodated. This addition should be made to the EA.

**Native American Tribal Cultural Resources** - As discussed in the EA (EA Section 3.6), consultations and discussions with tribal organizations and individuals, have revealed that the five tribes affiliated with the Owens Valley region object to this exploration project as it will destroy an unmodified landscape. Section 4.9 of the EA however, provides only a cursory overview of direct, indirect and cumulative impacts to Native American Tribal Cultural Resources and no specific discussion of mitigation, instead simply states that consultation is ongoing. This analysis of impacts to Native American Tribal Cultural Resources is inadequate to conclude that no significant impacts will result from the proposed action and alternatives. More specific analysis should be incorporated into the EA.

**Wilderness Characteristics** - The EA states in Section 3.15 that, “BLM will consider … the protection of wilderness character on public lands as part of its multiple-use mandate.” However, BLM fails to adequately address how that resource will be protected in the EA. Instead, the EA merely downplays the anticipated damage to this important resource. The BLM admits in EA Section 4.18.1.1 that the applicant’s Proposed Alternative will cause “severe” impacts to wilderness characteristics, but then claims that the incremental effects will be "limited in scope." This conclusion defies logic and does not address how the resource will be protected. The BLM claims in EA Section 4.18.2.1 that the impacts to wilderness characteristics would be “moderate and mitigatable” under the Minimum Road Alternative, but fails to provide evidence to support this claim or how the resource would be protected under this alternative. Finally, BLM states in EA Section 4.18.3.1 that the Preferred Alternative would have relatively "light, limited and short term" impacts on wilderness characteristics, but again fails to provide evidence to support this claim or how the resource would be protected.
It is clear from the analysis provided in the EA that wilderness characteristics will be degraded and/or destroyed by allowing the Perdito Exploration Project to move forward, whether that be by road construction, work vehicles and equipment moving into and out of the area, helicopter overflights, the dragging of water hoses in and around the area, or other disruptive activities. All of these activities will not just take place for a day or two, but during two 12-hour shifts for approximately eight months (EA Section 2.3.4). The BLM fails to adequately address how it will protect Conglomerate Mesa’s wilderness characteristics while at the same time allowing the Perdito Exploration Project to proceed. As part of this assessment of impacts, we also ask that the BLM consider limiting the project’s hours in operation over a 24-hour period to reduce noise and light impacts to wilderness characteristics (e.g., stop work order from dusk to dawn).

Hose Impacts – The EA describes the use and placement of one-inch diameter rubber hose for water transport on the site (EA Section 2.5.2). As stated, the water hose sections would be hand transported by workers on foot and laid on top of the existing terrain and that no disturbance from the water hoses is anticipated. Specific measures should be described in the EA to ensure no impacts occur from the proposed hose installation, movement, and decommissioning (e.g., no dragging).

Sensitive Plant Species - There are four species of 1B status plants (all considered BLM sensitive species) that are not addressed in the EA and occur within the immediate project area. These include: Jaeger’s hersperianthus (Hesperianthus jaegeri) California 1B.2 and S2 G2, Limestone daisy (Erigeron uncialis var. uncialis) California 1B.2 and S2 G3G4T2, and Wildrose Canyon buckwheat (Eriogonum eremicola) California 1B.3 and S2 G2. These species occur sympatrically with Inyo rock daisy and are limestone/dolomite endemics. The forth species, Pinyon Mesa buckwheat (Eriogonum meniscola) California 1B.3 and S3 G3, is also a likely species to occur given the habitat. The BLM should state in the EA whether these species were on the 2015-2017 survey list and whether or not they were located. Furthermore, we would like to point out that Mark Bagley’s 1997 surveys for two of these four plant species were done in March, likely too early to reliably detect Wildrose Canyon buckwheat.

Wildlife- The EA’s analysis of wildlife impacts is incomplete. First, breeding bird survey dates should be disclosed and a complete list of all species detected should be provided in the Appendix. Avian survey dates should correspond with the peak of the breeding season as to detect the most number of breeding species and ideally additional surveys should occur for wintering avian species as well (i.e., Golden-Crowned Kinglets, White Crowned Sparrows). Second, the EA does not mention the area as being a known wintering range for mule deer; the herd and estimated number of animals should be referenced in consultation with CDFW. Third, the EA lacks adequate surveys for reptiles and small mammals. There are numerous signs of burrows and scat along the restored road bed as well as throughout the mesa. Most species of reptiles and small mammals are best detected at night in the desert environment; therefore, nocturnal surveys are needed for a complete analysis of impacts to small mammals and reptiles (and in particular because work is currently proposed during two 12-hour shifts). Fourth, please include Bobcat as a known species that resides in the area. An individual was seen and positively
identified on October 4, 2017 within the north sagebrush meadow of the mesa. Lastly, we ask the BLM to consider restricting the project’s hours in operation over a 24-hour period to reduce impacts when wildlife is most active (e.g., stop work order from dusk to dawn).

Geology - The geology of Conglomerate Mesa is significant and should be referenced in the EA. The area is key to understanding the evolution of the ancient coastline of the southwestern U.S. from the Permian through the early Triassic (300 to 247 million years ago). The beds of the Conglomerate Mesa and the Santa Rosa Flat formations represent a complete geologic record from the Permian to the early Triassic. They have been invaluable to interpreting other similar, but incomplete sequences of strata in three other locations throughout the southwest. The Early Permian strata at Conglomerate Mesa are particularly important because they are not duplicated anywhere else. Additionally, fossil beds contain fusulinids (plankton with calcite shells) and corals. Three new genera and 12 new species of fusulinids were discovered within the strata that are found only at Conglomerate Mesa and are endemic. No fusulinids survived the Permian Extinction so an open-pit mine at this location would destroy the only record of their existence.

Two geologists spent decades mapping the Inyo Mountains and the Conglomerate Mesa area (Paul Stone of the USGS and Calvin Stevens of San Jose State University). Their papers should be cited in the EA and the significance of the Conglomerate Mesa geology should be included as well. Further, USGS should be a consulting party of any future analysis of impacts. Even with backfill requirements it will be impossible to restore the true geomorphology of the mesa should an open-pit mine be proposed here.

Summary

In closing, FOI, CalWild, the Sierra Club, the Amargosa Conservancy and the Wilderness Society would like to restate their opposition to the Perdito Exploration Project. We request that the BLM deny further exploration activities on the proposed site given the impacts associated with exploration in this sensitive location, the unlikely path forward for development of an open-pit, cyanide heap-leach mine, and the potential for exploration and mining activities to negatively impact the economy of Inyo County which is dependent on the natural environment in this region. We urge the BLM to select the no-action alternative, however if the agency decides to move forward with exploration, helicopter access is the only action alternative that should be permitted in this location. We also believe revisions to the EA are necessary prior to a Decision Record as outlined in our comments.

Our organizations, our Boards, members, and supporters will continue to stay engaged in this project and look forward to working with the BLM in a transparent and effective manner on these important issues.

Sincerely,

Linda Castro  
Assistant Policy Director  
CalWild

Jora Fogg  
Friends of the Inyo  
Preservation Manager

Phil Hanceford  
Conservation Director  
The Wilderness Society

Francis Hunt  
Eastern Sierra Organizer  
Sierra Club

Lynn Bolton  
Chair  
Range of Light Group, Sierra Club

Tanya Henderson  
Executive Director  
Amargosa Conservancy