

**Arizona Mining Reform Coalition, Center for  
Biological Diversity, Defenders of Wildlife,  
Earthworks, Patagonia Area Resource Alliance, Sky  
Island Alliance**

Via Hand Delivery

April 10, 2014

Coronado National Forest  
Mark J. Ruggiero, District Ranger  
Attn: Margie DeRose, Hermosa Drilling Project  
300 W. Congress Street, 6<sup>th</sup> Floor  
Tucson, AZ 85701

**Re: Comments on Draft EA, Hermosa Drilling Project:**

Dear Coronado National Forest and District Ranger Ruggiero:

Per the U.S. Forest Service's ("USFS") March 4, 2014 Interested Party public notice, this letter (and attachments) contain comments on the proposed Hermosa Drilling Project and the request by Arizona Minerals, Inc. ("AMI") for approval of a Plan of Operations ("PoO") for the Hermosa Drilling Project (hereinafter "the Project"). AMI is a subsidiary of Wildcat Silver Corporation ("Wildcat Silver"), a publicly traded company with headquarters in Vancouver, Canada.

These comments are submitted on behalf of Arizona Mining Reform Coalition ("AMRC"), the Center for Biological Diversity ("the Center"), Defenders of Wildlife ("Defenders"), Earthworks, the Patagonia Area Resource Alliance ("PARA") and Sky Island Alliance ("SIA"), and supplement and incorporate any prior or related comments from these organizations and or individual members of these organizations. We also incorporate by reference in these comments all of the comments on the Project submitted by Sky Island Alliance.

AMRC works in Arizona to improve state and federal laws, rules, and regulations governing hard rock mining to protect communities and the environment. AMRC works to hold mining operations to the highest environmental and social standards to provide for the long term environmental, cultural, and economic health of Arizona. Members of the Coalition include: The Grand Canyon Chapter of the Sierra Club, Earthworks, Save the Scenic Santa Ritas, Maricopa Audubon Society, Environment Arizona, the Dragoon Conservation Alliance, the Groundwater Awareness League, the Empire-Fagan Coalition, Concerned Citizens and Retired Miners Association, Concerned Climbers of Arizona, the Center for Biological Diversity, Sky Island Alliance, Tucson Audubon Society, and the Patagonia Area Resource Alliance.

The Center is a non-profit public interest organization with an office located in Tucson, Arizona, representing more than 650,000 members and supporters nationwide dedicated to the conservation and recovery of species at-risk of extinction and their habitats. The Center has long-standing interest in projects of ecological significance undertaken in the Coronado National Forest.

Defenders is a national, nonprofit membership organization dedicated to the protection of all native animals and plants in their natural communities. Defenders currently has 1,199,702 members and supporters nationwide, including 27,315 in Arizona. Defenders is committed to protecting wild lands and wildlife in Arizona, and its Southwest office is located in Tucson, Arizona.

Earthworks is a nonprofit organization dedicated to protecting communities and the environment from the impacts of irresponsible mineral and energy development while seeking sustainable solutions.

PARA is a grassroots, non-profit organization of volunteer community members committed to protecting and preserving the Patagonia, Arizona area. PARA is a watchdog organization that monitors the activities of industrial developers such as mining corporations, as well as government agencies, to make sure their actions have long-term, sustainable benefits to our public lands, our watershed, and the town of Patagonia.

SIA is a bi-national grassroots organization dedicated to the protection and restoration of the rich natural heritage of native species and habitats in the Sky Island region of the southwestern United States and northwestern Mexico.

As shown in more detail below, the Draft EA and proposed decision to approve the PoO does not comply with the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the USFS Organic Act of 1897, the National Forest Management Act (NFMA), USFS mining regulations at 36 CFR Part 228, and other legal requirements. As such, and at a minimum, the USFS must issue a revised Draft EA for public review and comment. Further, due to the potential for significant impacts from the Project's direct, indirect and cumulative effects, an Environmental Impact Statement (EIS) must be prepared in accordance with NEPA.

**I. THE REVISED DRAFT EA OR EIS MUST FULLY EXPLAIN ALL BASELINE CONDITIONS PRIOR TO ANALYZING OR APPROVING THE EXPLORATION PROPOSAL**

The PoO submitted by AMI seeks approval of a series of wells, pits, drilling and other activities to obtain baseline information on the hydrologic, groundwater, geologic, geotechnical, and other site and area conditions. PoO at Section 4.3. This essentially admits that AMI and USFS currently lack accurate or complete baseline data and information.

The Plan, however, also seeks approval for mineral exploration (drilling, roads, etc.) at the same time as the baseline data on environmental conditions will be gathered. Such approval of mineral exploration operations prior to the agency's gathering and analysis of baseline conditions violates NEPA.

The Forest Service is required to “describe the environment of the areas to be affected or created by the alternatives under consideration.” 40 C.F.R. § 1502.15. The establishment of the baseline conditions of the affected environment is a fundamental requirement of the NEPA process:

“NEPA clearly requires that consideration of environmental impacts of proposed projects take place before [a final decision] is made.” LaFlamme v. FERC, 842 F.2d 1063, 1071 (9th Cir.1988) (emphasis in original). Once a project begins, the “pre-project environment” becomes a thing of the past, thereby making evaluation of the project's effect on pre-project resources impossible. Id. Without establishing the baseline conditions which exist in the vicinity ... before [the project] begins, there is simply no way to determine what effect the proposed [project] will have on the environment and, consequently, no way to comply with NEPA.

Half Moon Bay Fisherman's Mark't Ass'n v. Carlucci, 857 F.2d 505, 510 (9<sup>th</sup> Cir. 1988). “In analyzing the affected environment, NEPA requires the agency to set forth the baseline conditions.” Western Watersheds Project v. BLM, 552 F.Supp.2d 1113, 1126 (D. Nev. 2008). “The concept of a baseline against which to compare predictions of the effects of the proposed action and reasonable alternatives is critical to the NEPA process.” Council of Environmental Quality, Considering Cumulative Effects under the National Environmental Policy Act (May 11, 1999).

Such baseline information and analysis must be part of the EA/EIS and be subject to public review and comment under NEPA. The lack of an adequate baseline analysis fatally flaws an EA or EIS. “[O]nce a project begins, the pre-project environment becomes a thing of the past and evaluation of the project's effect becomes simply impossible.” Northern Plains v. Surf. Transp. Brd., 668 F.3d 1067, 1083 (9th Cir. 2011). “[W]ithout [baseline] data, an agency cannot carefully consider information about significant environment impacts. Thus, the agency fail[s] to consider an important aspect of the problem, resulting in an arbitrary and capricious decision.” Id. at 1085.

In Idaho Conservation League, 2012 WL 3758161 (D. Idaho 2012), the Idaho federal court concluded that the Forest Service acted arbitrarily and capriciously by authorizing exploratory hardrock mineral drilling without fully analyzing the baseline groundwater and hydrology. Id. at \*17. Such analysis should include “a baseline hydrogeologic study to examine the existing density and extent of bedrock fractures, the hydraulic conductivity of the local geologic formations, and [measures of] the local groundwater levels to estimate groundwater flow directions.” Idaho Conservation League, 2012 WL 3758161, at \*16. See also Shoshone-Bannock Tribes of Fort Hall Reservation v. U.S. Dept. of Interior, 2011 WL 1743656, at \*10 (D. Idaho 2011).

Here, at a minimum, prior to considering or approving any exploration, the Forest Service must first obtain this required information and subject the information and analysis to public review and comment in a revised draft EA or EIS. As the PoO acknowledges, exploration will likely affect groundwater – making the gathering of pre-Project baseline information critical. The

Draft EA also admits that groundwater will be encountered and indeed removed by Project operations. *See, e.g.*, Draft EA at 73-75. Despite this, the Draft EA, at 69, admits that “Groundwater quality data for the project area is limited.”

“NEPA requires that the agency provide the data on which it bases its environmental analysis. Such analyses must occur before the proposed action is approved, not afterward.” Northern Plains, 668 F.3d at 1083 (internal citations omitted) (concluding that an agency’s “plans to conduct surveys and studies as part of its post-approval mitigation measures,” in the absence of baseline data, indicate failure to take the requisite “hard look” at environmental impacts). This requirement applies not only to ground and surface waters, but any potentially affected resource such as air quality, recreation, soils, or wildlife.

## II. THE REVISED DRAFT EA OR EIS MUST FULLY ANALYZE ALL DIRECT, INDIRECT, AND CUMULATIVE IMPACTS

The Forest Service must fully review the impacts from all “past, present, and reasonably foreseeable future actions.” These are the “cumulative effect/impacts” under NEPA. To comply with NEPA, the Forest Service must consider all direct, indirect, and cumulative environmental impacts of the proposed action. 40 CFR §§ 1502.16, 1508.8, 1508.25(c). Direct effects are caused by the action and occur at the same time and place as the proposed project. 40 CFR § 1508.8(a). Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. 40 CFR § 1508.8(b). Both types of impacts include “effects on natural resources and on the components, structures, and functioning of affected ecosystems,” as well as “aesthetic, historic, cultural, economic, social or health [effects].” *Id.* Cumulative effects are defined as:

[T]he 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 CFR § 1508.7. In a cumulative impact analysis, an agency must take a “hard look” at all actions.

An EA's analysis of cumulative impacts must give a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment. ... Without such information, neither the courts nor the public ... can be assured that the [agency] provided the hard look that it is required to provide.

Te-Moak Tribe of Western Shoshone v. U.S. Dept. of Interior, 608 F.3d 592, 603 (9th Cir. 2010) (rejecting EA for mineral exploration that had failed to include detailed analysis of impacts from nearby proposed mining operations).

A cumulative impact analysis must provide a “useful analysis” that includes a detailed and quantified evaluation of cumulative impacts to allow for informed decision-making and public disclosure. Kern v. U.S. Bureau of Land Management, 284 F.3d 1062, 1066 (9th Cir. 2002); Ocean Advocates v. U.S. Army Corps of Engineers, 361 F.3d 1108 1118 (9th Cir. 2004). The NEPA requirement to analyze cumulative impacts prevents agencies from undertaking a piecemeal review of environmental impacts. Earth Island Institute v. U.S. Forest Service, 351 F.3d 1291, 1306-07 (9th Cir. 2003).

The NEPA obligation to consider cumulative impacts extends to all “past,” “present,” and “reasonably foreseeable” future projects. Blue Mountains, 161 F.3d at 1214-15; Kern, 284 F.3d at 1076; Hall v. Norton, 266 F.3d 969, 978 (9th Cir. 2001) (finding cumulative analysis on land exchange for one development failed to consider impacts from other developments potentially subject to land exchanges); Great Basin Mine Watch v. Hankins, 456 F.3d 955, 971-974 (9th Cir. 2006)(requiring “mine-specific ... cumulative data,” a “quantified assessment of their [other projects] combined environmental impacts,” and “objective quantification of the impacts” from other existing and proposed mining operations in the region).

As the Ninth Circuit has further held:

Our cases firmly establish that a cumulative effects analysis “must be more than perfunctory; it must provide a useful analysis of the cumulative impacts of past, present, and future projects.” Klamath–Siskiyou, 387 F.3d at 994 (emphasis added) (quoting Ocean Advocates v. U.S. Army Corps of Eng’rs, 361 F.3d 1108, 1128 (9th Cir.2004)). To this end, we have recently noted two critical features of a cumulative effects analysis. First, it must not only describe related projects but also enumerate the environmental effects of those projects. *See* Lands Council v. Powell, 395 F.3d 1019, 1028 (9th Cir.2005) (holding a cumulative effects analysis violated NEPA because it failed to provide “adequate data of the time, place, and scale” and did not explain in detail “how different project plans and harvest methods affected the environment”). Second, it must consider the interaction of multiple activities and cannot focus exclusively on the environmental impacts of an individual project. *See* Klamath–Siskiyou, 387 F.3d at 996 (finding a cumulative effects analysis inadequate when “it only considers the effects of the very project at issue” and does not “take into account the combined effects that can be expected as a result of undertaking” multiple projects).

Oregon Natural Resources Council Fund v. Brong, 492 F.3d 1120, 1133 (9<sup>th</sup> Cir. 2007). None of the “cumulative effects/impacts” discussions in the Draft EA for the various resources and impacts contain this required quantification and other detailed reviews required by NEPA. Note that the requirement for a full cumulative impacts analysis is required in an EA, as well as in an EIS. *See* Te-Moak Tribe of Western Shoshone, 608 F.3d 592, 603 (9th Cir. 2010) (rejecting EA for mineral exploration that had failed to include detailed analysis of impacts from nearby proposed mining operations).

NEPA regulations also require that the FEIS obtain the missing “quantitative assessment” information:

When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.

(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.

(b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:

(1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, "reasonably foreseeable" includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.

40 CFR § 1502.22. "If there is 'essential' information at the plan- or site-specific development and production stage, [the agency] will be required to perform the analysis under § 1502.22(b)." Native Village of Point Hope v. Jewell, --- F.3d ----, 2014 WL 223716, \*7 (9<sup>th</sup> Cir. 2014). Here, the adverse impacts from the Project when added to other past, present or reasonably foreseeable future actions is clearly essential to the USFS' determination (and duty to ensure) that the Project complies with all legal requirements and minimizes all adverse environmental impacts.

"[W]hen the *nature* of the effect is reasonably foreseeable but its *extent* is not, we think that the agency may not simply ignore the effect. The CEQ has devised a specific procedure for 'evaluating reasonably foreseeable significant adverse effects on the human environment' when 'there is incomplete or unavailable information.' 40 C.F.R. § 1502.22." Mid States Coalition for Progress v. Surface Transportation Board, 345 F.3d 520, 549-550 (8<sup>th</sup> Cir. 2003)(emphasis in original). The USFS's failure to obtain this information, or make the necessary showings under § 1502.22, for all direct, indirect and cumulative impacts thus violates NEPA.

Thus, in this case, the Forest Service must fully consider the cumulative impacts from all past, present, and reasonably foreseeable future projects in the region on, at a minimum, water and air quality including ground and surface water quantity and quality, recreation, cultural/religious, wildlife, transportation/traffic, scenic and visual resources, etc. At a minimum, this requires the agency to fully review, and subject such review to public comment in a draft EA or EIS, the

cumulative impacts from all other mining, grazing, recreation, energy development, roads, etc., in the region.

The Draft EA lists the reasonably foreseeable future actions (Table 20, at p. 93), yet fails to conduct the “quantified assessment of their [other projects] combined environmental impacts,” and “objective quantification of the impacts” from other existing and proposed activities in the region, as required by NEPA and Ninth Circuit precedent. A brief and cursory mention of the overall potential impacts from these other activities does not comply with NEPA.

As just one example, the Draft EA admits that other mining exploration is under consideration adjacent to the Hermosa Project (e.g., Sunnyside project) and in close proximity to the Hermosa Project (e.g. Dice #8 project, Javelina project, CH project, Moore and Moore #4 project), yet the actual impacts of these projects, when coupled with the Hermosa Project, are not analyzed at all in the Draft EA. This is especially problematic with regard to ESA-listed and other protected wildlife species. The USFS’ Biological Assessment analysis, Draft EA, Table 16 at 52-3, is largely premised on the relatively small “footprint” of the Hermosa Project. However, this analysis does not analyze potential impacts of multiple projects, each with a relatively small direct footprint, taking place in the same general area at the same time. Disturbances to wildlife from lights, noise, and human activities obviously reach beyond the relatively small footprint of the individual projects. Multiple such projects taking place during the same general time period may render a much larger area unusable by wildlife, or at a minimum have adverse effects not analyzed in the Draft EA. The Hermosa Project will take place over a two-year period. Draft EA at 92 (“The temporal scope of the cumulative impacts analysis assumes that [the] Hermosa Drilling Project activities will occur within a two-year period”). The Sunnyside project is anticipated to start within 2 years, the Dice #8 project is anticipated to start within 2 years, the Javelina project is anticipated to start within 3 years, as are the CH and Moore and Moore #4 projects. Draft EA, Table 20 at 93.

Accordingly, wildlife species which avoid or are harmed by light, noise, and human activities may avoid a much larger area during the next two to three years than just the mere footprint of the Hermosa Project. The EA does not analyze this cumulative impact on wildlife species, in violation of NEPA. *See, e.g., Klamath-Siskiyou*, 387 F.3d at 994 (“[s]ometimes the total impact from a set of actions may be greater than the sum of the parts”); *ONRC v. Goodman*, 505 F.3d 884, 893 (9<sup>th</sup> Cir. 2007) (“A particular action may seem unimportant in isolation, but that small action may have dire consequences when combined with other actions.”)

For example, in discussing the Mexican spotted owl (*Strix occidentalis lucida*), the EA reports that there is designated critical habitat in the Project area and Mexican spotted owls are known to occur within 1 mile of the action area. Draft EA, Table 14 at 45. The Draft EA then states that no Mexican spotted owls were detected in the Project area during 2012 field surveys, *Id.*, and concludes that there will be no likely adverse effects on this species and no effects on its designated critical habitat. Draft EA, Table 16, at 52. The Draft EA’s conclusion is premised upon “preferable Mexican spotted owl nesting, roosting, and foraging habitat [being] available external to the project area.” *Id.* However, USFS’ cumulative impacts analysis does not analyze that this “preferable” Mexican spotted owl habitat “external” to the Project area will also be impacted in the foreseeable future by the other projects discussed above. In particular, the

adjacent Sunnyside project, which will likely overlap in time with the Hermosa Project, is likely to impact these Mexican spotted owl habitats. (See maps “Mexican spotted owl PAC areas and drilling locations” and “Mexican Spotted Owls in Humboldt Canyon - November 17, 2012” attached).

The Mexican spotted owl has been observed in the proposed Sunnyside area. A pair of Mexican spotted owls was observed roosting together in a tree located in Humboldt Canyon, within the Sunnyside project area on November 26, 2011. The observation was reported to Shaula Hedwell of USFWS via email on December 16, 2011. There was another observation of a pair of Mexican spotted owls in Humboldt Canyon on November 17, 2012. That observation was reported to Jean A. Calhoun of USFWS on November 27, 2012 via email. Calhoun reported sharing the information with the USFS Sierra Vista District Ranger and SV District biologist. On February 21, 2013 SV District biologist John Kraft informed Calhoun in an email that the FS knows about the “occupied PAC area” in Humboldt Canyon near the Sunnyside project area. (See emails attached).

Likewise, the Draft EA states that jaguar (*Panthera onca*) are “[k]nown to occur within 1-mile buffer of project area.” Draft EA, Table 14, at 45. The EA also states that the proposed Project is not likely to adversely affect jaguar because “[t]he project would impact small, localized areas of habitat, but will not impact large tracts that would impede jaguar movement or result in long-term fragmentation.” Draft EA, Table 16, at 53. However, just as the Draft EA fails to analyze the potential cumulative effect of multiple projects within the area on Mexican spotted owl, the Draft EA also fails to analyze the effect of having multiple contemporaneous projects within jaguar critical habitat. As shown in Table 20, Draft EA at 93, there are multiple scheduled and ongoing projects within and near the proposed Project area. These include other mineral exploration projects, the Rosemont Copper Mine, grazing, fire suppression and fuel reduction activities, housing developments and recreation activities. Id. at 93-97.

The biological assessment relied on in the Draft EA specifically notes that some of the primary threats to jaguar are “[i]ncreased human presence in remote locations due to mining and development activities,” as well as “human developments that may block access to movement corridors or fragment contiguous habitats.” Tetra Tech (2014c) at 58. Further, the critical habitat designation for the jaguar specifically references the Hermosa Project area and states that the “conservation value of the area for the jaguar may be even greater than [other areas impacted by mining operations] because the Hermosa project is only 9 miles north of the U.S.-Mexico border, meaning that this area is very important for maintaining connectivity to Mexico.” Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Jaguar, 79 Fed. Reg. 12572, 12632 (March 5, 2014). Therefore, while the Project itself may not block movement or habitat corridors for jaguar, the cumulative effect of all proposed and ongoing projects within the area may be avoidance of this important corridor by jaguars. Due to the fact that no established jaguar populations exist in the United States, and this Project area represents one of the few access points for jaguar to enter in order to re-establish populations in designated critical habitat, it is necessary for the Forest Service to adequately assess potential cumulative effects on jaguar from all ongoing and proposed projects within the Project area. The proposed site is also within the Northwestern Recovery Unit for the jaguar [Recovery Outline for the Jaguar (*Panthera onca*), April 2012, USFWS].



In addition, the following other reasonably foreseeable activities in the area were not even mentioned/listed in the Draft EA, let alone subject to the required quantified assessment of their impacts as noted above.

Lastly, the Draft EA fails to recognize that the company's mining proposal, known also as the "Hermosa Project" ("Hermosa Mining Project"), is reasonably foreseeable as acknowledged by the company itself. Attached is the Form 43-101F1 Technical Report submitted by Wildcat Silver, dated January 17, 2014, which described "the proposed project:"

The proposed project is an open pit silver and manganese mine that delivers mineralized material to a processing facility that handles up to 13,700 tpd (tons per day) or 5,000,000 tpy (tons per year). The processing facility treats the material with crushing, dry magnetic separation, grinding, calcining, leaching, zinc solvent extraction and electrowinning, SART precipitation and Merrill Crowe refining. Additionally, the tailings material will be sent through a wet high-intensity magnetic separation (WHIMS) process to produce a 35% manganese concentrate that will be processed through an electrowinning plant to produce an electrolytic manganese metal (EMM) product. The project is located near Patagonia, Arizona, USA, which has a balance of remoteness and proximity to infrastructure. Over the life of the project, 103,350,000 ounces (troy ounces) of silver 179,000 ounces of gold, 120,445,000 pounds of zinc, 36,370,000 pounds of copper, and 1,984,140,000 pounds of manganese are projected to be produced.

Wildcat Silver Technical Report, at 1. The fact that the Hermosa Mining Project has yet to be formally submitted to the USFS does not mean that it is not "reasonably foreseeable" under NEPA, as the company already acknowledges it as a viable "proposed project."

The Hermosa Project is located in the northern end of the Patagonia Mountains in southern Arizona. Elevations on the property range from 4,800 to 6,200 feet above sea level. The area is sparsely populated. Livestock grazing is the dominant land use. The property is located within the USFS Farrell Grazing Allotment. The core of the property is composed of 152.24 acres of fee simple surface and mineral rights ownership on patented mining claims. These patented mining claims are surrounded by 724 unpatented mining claims (13,516.04 acres) held by Arizona Minerals Inc. These federal lands are administered by the United States Forest Service, Coronado National Forest, US Department of Agriculture. The Sierra Vista Ranger District of the Coronado National Forest is the responsible agent.

Wildcat Silver Technical Report, at 3. In any event, as held by the Ninth Circuit:

[P]rojects need not be finalized before they are reasonably foreseeable. "NEPA requires that an EIS engage in reasonable forecasting. Because speculation is ... implicit in NEPA, [ ] we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as crystal ball inquiry." Selkirk, 336 F.3d at 962 (internal quotation marks and citation omitted). As the Environmental Protection Agency (EPA) also has noted, "reasonably foreseeable future

actions need to be considered even if they are not specific proposals.” EPA, *Consideration of Cumulative Impact Analysis in EPA Review of NEPA Documents*, Office of Federal Activities, 12–13 (May 1999), available at <http://www.epa.gov/compliance/resources/policies/nepa/cumulative.pdf>.

Northern Plains Resource Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1078-79 (9<sup>th</sup> Cir. 2011). Additionally, the federal courts have routinely required the agencies to review the impacts from future, not-yet-proposed mineral activity when preparing EAs or EISs for mineral leasing projects.

BLM finally argues that at this stage, the exact scope and extent of drilling that will involve fracking is unknown, so NEPA analysis, if any, should be conducted when there is a site-specific proposal. But “the basic thrust” of NEPA is to require that agencies consider the range of possible environmental effects before resources are committed and the effects are fully known. “Reasonable forecasting and speculation is thus implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as ‘crystal ball inquiry.’”

Center for Biological Diversity v. Bureau of Land Management, 937 F.Supp.2d 1140, 1157 (N.D. Cal. 2013) *citing* City of Davis v. Coleman, 521 F.2d 661, 676 (9<sup>th</sup> Cir.1975) and Northern Plains, 668 F.3d at 1079. *See also*, Connor v. Burford, 848 F.2d 1441 (9<sup>th</sup> Cir. 1988)(future impacts of drilling must be analyzed when preparing NEPA document for oil and gas lease); Colorado Environmental Coalition v. Office of Legacy Management, 819 F.Supp.2d 1193, 1209-09 (D. Colo. 2011)(impacts from future, as-yet-unproposed mining must be considered when preparing NEPA document for leasing decision).

In New Mexico ex rel. Richardson v. Bureau of Land Management, 565 F.3d 683, 718-19 (10<sup>th</sup> Cir. 2009), the Tenth Circuit determined that future mineral activity was “reasonably foreseeable” due to the fact that “considerable exploration has already occurred on parcels adjacent to the [challenged] parcel,” a developable mineral deposit “is known to exist beneath these parcels,” and the company “has concrete plans to build” a mineral project on these lands. All of these conditions are present here – as acknowledged by Wildcat Silver. Indeed, this evidence is not only contained in the company’s Technical Report, it is attested to under penalties in the securities regulations noted in the Report.

As such, the Hermosa Mining Project and its impacts must be fully reviewed, along with the other reasonably foreseeable future activities noted herein, in the revised Draft EA or in an EIS. The draft EA also provides insufficient consideration of potentially significant impacts to human health and safety.

The most glaring omission of information related to potential significant impact are those relating to local water quality in the Patagonia and Harshaw areas, in Harshaw Creek, and in Sonoita Creek. The following potentially environmentally and socially significant issues were not considered in any substantive way in the Draft EA.

1. The status of the Harshaw Creek basin as the designated Town of Patagonia Municipal Supply Watershed

The United States Forest Service officially designated the upper and lower Harshaw Creek basins as the Town of Patagonia Municipal Supply Watershed, due to the fact that water sourced from this watershed serves as municipal drinking water for the Town of Patagonia and 300 area wells. Isotope tracer studies were performed in 2008 by Gu et. al. that effectively prove that anywhere from 30 to 50 percent of the flow in Sonoita Creek, the source of Patagonia's water, is fed from the Patagonia Mountains. A significant contribution from the Patagonia Mountains flows through Harshaw Creek (usually underground) and into Sonoita Creek at the confluence just East of the Town of Patagonia. While the Draft EA does mention the local groundwater end-uses, including for municipal purposes (along with agricultural, tribal, and industrial end-uses), it does not explicitly address the watershed's municipal status nor the implications this status may have on water usage and possible impacts to drinking water.

2. Impacts to TMDL attainment in Harshaw Creek for copper and acidity

The primary source of both copper and acidity in Harshaw Creek, according to its established Total Maximum Daily Load (TMDL) allowance in the ADEQ 2003 report, is from surface water drainage through mine tailings. That is to say, surface water is assumed to be a much larger contributor to pollutant concentrations in Harshaw Creek relative to groundwater contributions. As such, an assessment of the impacts from changes to surface water hydrology would be necessary in order to understand what likely impacts will be to the water quality of Harshaw Creek as well as the ability to meet TMDL attainment for that waterbody. A surface water hydrology study could help to identify which areas within the watershed are most likely to contribute pollutants and target those areas for priority remediation. USFS recently installed a stream gage in Harshaw Creek (~ 1 month ago), and data from this gage will be useful in performing future assessments of the creek and determining whether or not it is in attainment for copper and acidity.

Following a surface water study, a groundwater study would also be helpful in order to better understand what the impacts of pumping might be on the creek's water quality and TMDL status. Removing groundwater that feeds the creek, and re-applying it to the surface of the watershed (e.g. for dust mitigation) could have a significant compounding negative impact on water quality by both reducing the amount of dilution provided by the removed groundwater and also increasing the potential for surface water run-off that could contain criteria pollutants (i.e. copper and acidity). While the Draft EA does mention that water tests will be performed on water that is removed from monitoring bore holes, it does not specify what will be tested for (e.g. copper). No mention is made of groundwater modeling, which would be needed in order to even begin to estimate the possible impacts on water quality, either in Harshaw Creek or further downstream at the Town of Patagonia.

3. Impacts to metal pollutant concentrations in Sonoita Creek

While the potential impacts to Harshaw Creek are direct, localized, and fairly obvious, less-obvious but still potentially significant impacts to Sonoita Creek should also be considered

carefully. Sonoita Creek supports a relatively large and more-diverse end-use population than Harshaw, including protected wildlife habitat, sensitive ecological systems, and recreational use areas, all of which attract tourists to the area and as such are vital to the established local economies. A TMDL report is currently being crafted for Sonoita Creek to characterize its non-attainment status potential for zinc. These pollutant concerns are of importance not only to Sonoita Creek, but also to Patagonia Lake and potentially also to the Santa Cruz River, the ultimate destination of water flowing through Sonoita Creek. Since Sonoita Creek no longer contains a stream gage, it is difficult to know exactly how much water is currently flowing through the waterbody and what impacts there are likely to be from changes in tributary flows.

If less water is flowing through Harshaw Creek and into Sonoita Creek, it stands to reason that the concentration of preexisting pollutants could rise, all else remaining equal. Though it may be challenging to accurately quantify this potential impact and determine to what degree it will be significant a priori, it also cannot be disregarded off-hand as insignificant. More-detailed investigation and a consideration of all existing evidence, including strategic water quality and flow monitoring are needed. If these issues are ignored and proposed mining-related actions do have significant impacts on the total flow in Sonoita Creek and, as a result, the concentration of zinc in the waterbody, it could lead to any number of detrimental outcomes. A few scenarios include: reduced populations of sensitive and protected aquatic biota, closure of Patagonia Lake due to EPA superfund or brownfield status, an expansion of the TMDL-specific reach of Sonoita Creek to include the Town of Patagonia and the potential need for additional water quality treatment, just to name a few.

The status of the Harshaw Creek basin as the designated Town of Patagonia Municipal Supply Watershed; the impacts to TMDL attainment in Harshaw Creek for copper and acidity; and the impacts to metal pollutant concentrations in Sonoita Creek are significant; and these issues, concerns, needs, and evaluation approaches were not mentioned in the Draft EA.

The Draft EA includes what seems to be a new class of roads, without any discussion or analysis of the impacts of these roads. The Draft EA calls for “overland vehicle paths” and “proposed overland footpaths.” The potential for either the vehicle paths and footpaths becoming established roads is high and not fully (if at all) discussed in the Draft EA. The impact of all traffic, by new, old, or whatever roads and trails need to be analyzed including the thoroughness of reclamation of these roads. All too often, mine exploration road become permanent and create substantial erosion and/or vectors for further disturbance. The final EA or EIS needs to include a full discussion of these proposed user created roads and trails along with additional measure to assure that they would be fully removed upon completion of the drilling plan. The Draft EA did not fully evaluate the use of alternative measures to reach some of the drilling areas, improperly dismissed alternative methods of accessing drilling locations and did not suggest the use of directional drilling methods to reduce the footprint of disturbance. The Draft EA did not show conclusively that the Project would cause a minimal amount of disturbance or that the Plan would not violate the Forest Plan.

Finally, the Draft EA does not include any assessment of the possible economic impacts the Project could have on the Town of Patagonia, especially when considering the cumulative effects of other mining projects slated for the area.

Arizona Minerals, Inc. has 46 separate sites slated for exploratory drilling, geotechnical drilling, test pits, and/or hydrogeologic drilling/monitoring wells spread out over 2 square miles of the Patagonia Mountains in the Coronado National Forest. Drilling would occur for 2 years with well monitoring happening for 15 years. Anyone traveling on Harshaw Road, Harshaw Creek Road, Meadow Valley or in the San Rafael Valley will be visually impacted by this project. Many recreational motorists and cyclists travel on these roads. Also, traffic on Forest Road 49 and Forest Road 58 will be greatly increased by the commuting mine workers and mine traffic, given that the 46 sites are spread so far apart. Cumulative traffic effects must also take into consideration the activities of the Department of Homeland Security. The 24 hour, 7 day a week noise, traffic, lights and dust from the AMI exploration will discourage recreational activities and tourism, significantly impacting the economics of the area.

Aside from the Hermosa project, there are five other proposed mining activities located in the Patagonia Mountains listed on the Forest Service website. These proposed activities are Moore and Moore No. 4 Placer Mine; Dice No. 8 Placer Mine; Javelina exploration project; Sunnyside exploration project and CH exploration project. The Sunnyside project is anticipated to start within 2 years, the Dice #8 project is anticipated to start within 2 years, the Javelina project is anticipated to start within 3 years, as are the CH and Moore and Moore #4 projects. Draft EA, Table 20 at 93. The Patagonia Mountains are an important socioeconomic resource for the surrounding communities. This area is internationally known as a premier birding destination. The Arizona National Scenic Trail goes through the Patagonia Mountains offering opportunities for birding, hiking, mountain biking, cycling, and equestrian activities. The Arizona Trail follows Harshaw Road for 3 miles into the town of Patagonia. Other recreational activities in the Patagonia Mountains include, camping, hunting, stargazing, geo-caching, motorcycle touring, OHV travel, shooting, backpacking, wildlife watching and tracking, and peak bagging. Visitors who participate in these activities bring a significant amount of revenue to the tourist oriented businesses in the surrounding communities. Impacts to tourism from the Project, along with Rosemont and the five other proposed mining operations in the Patagonia Mountains, would have significant and permanent adverse impacts on the economic well-being of the Sonoita, Elgin and Patagonia area.

The proposed Sunnyside project will block access to Humboldt Canyon during their one year exploratory drilling project. Humboldt Canyon is a very popular birding, hiking, and hunting area. These recreationists will no longer have access to this unique canyon. Additionally, the noise from the 24 hour a day, 7 day a week drilling operation will discourage other quiet recreation in areas nearby in the National Forest. It will also frighten away wildlife, discouraging hunting and wildlife viewing nearby. The wildlife track monitoring project that occurs every eight weeks in Humboldt Canyon will also be discontinued by the drilling activities and road closure.

The proposed Rosemont Mine, along with the cumulative effects of these six mining proposals in the Patagonia Mountains, will have a significant impact on the traffic traveling on Highway 82 and Highway 83. After years of claiming that the Rosemont Mine truck traffic would only go north to Tucson, the Sonoita and Patagonia area are now faced with the prospect of Rosemont's haul trucks traveling back and forth to Nogales via Highways 83 and 82. The cumulative effects

of the traffic from all of the proposed mining activities occurring concurrently, as well as the trucks from the Morenci mine which are currently traveling through the area on Highways 82 and 83, will clog Highways 82 and 83, discouraging visitors and therefore, negatively affecting the area's tourist based economy.

According to a report by Power Consulting, in early December of 2011, two local business owners surveyed the owners of all identified small businesses in the area surrounding the towns of Sonoita, Elgin, and Patagonia in Santa Cruz County. They identified 217 businesses employing approximately 800 people. The survey asked two questions:

What percentage of the firm's sales was derived from visitors to the area?

What percentage of those visitors were drawn to the area by its landscape and cultural amenities?

The responses indicated that about 66 percent of these firms' sales were tied to the purchases of visitors rather than residents. In addition, 78 percent of the visitors were drawn to the area by the landscape and cultural amenities as opposed to just passing through, being on business, visiting family, etc. Combined, these results indicate that the landscape and cultural amenities were responsible for 51 percent of local business sales in the area. If employment is proportional to sales, this would suggest that 386 local jobs are associated with the surrounding landscape and cultural amenities in this small town and rural area.

The Draft EA does not assess, much less do a quantitative analysis of the possible economic effects the Project could have on the town of Patagonia and the surrounding area. The fact that the Project would last only two years does not negate its significant negative economic impacts, especially when combined with the cumulative effects of the other mining proposals slated for the area, as well as the increased traffic from mining trucks and worker vehicles. The Forest Service must analyze the potential significant economic impacts from the Project as it combines with other mining proposals in the area and include this analysis in an EIS.

### III. FAILURE TO CONDUCT THE REQUIRED ADEQUATE ANALYSIS RENDERS ANY POTENTIAL FINDING OF NO SIGNIFICANT IMPACT (FONSI) INADEQUATE – NECESSITATING PREPARATION OF AN EIS.

The Project poses potentially significant risks to wildlife (including threatened and endangered species), groundwater and surface water resources, cultural/historical, air quality, recreation, and other resources. It should be noted that, without the required baseline analysis, it is impossible to fully ascertain the level of threats to public land resources. Because of the potentially significant impacts, an EIS is required.

An EIS "must be prepared if substantial questions are raised as to whether a project may cause significant degradation of some human environmental factor." Klamath Siskiyou Wildlands Center v. Boody, 468 F.3d 549, 562 (9th Cir. 2006). "[A] plaintiff need not show that significant effects *will in fact occur*, but if the plaintiff raises substantial questions whether a project may have a significant effect, an EIS must be prepared." Idaho Sporting Congress v. Thomas, 137

F.3d 1146, 1150 (9th Cir.1998) (emphasis in original). “This is a low standard.” Klamath Siskiyou, 468 F.3d at 562. *See also* Te-Moak Tribe of Western Shoshone v. Department of the Interior, 608 F.3d 592, 602 (9<sup>th</sup> Cir. 2010) (“NEPA requires that where several actions have a cumulative . . . environmental effect, this consequence must be considered in an EIS.”).

In this case, for example, in addition to failing to meet NEPA’s cumulative impacts requirement in the Draft EA, the agency’s decision to not prepare an EIS (i.e., proposed FONSI) violates NEPA, as the lack of an adequate cumulative impacts analysis necessarily renders any FONSI inadequate and arbitrary and capricious. “[W]here ‘several actions have a cumulative ... environmental effect, this consequence must be considered in an EIS.’ City of Tenakee Springs v. Clough, 915 F.2d 1308, 1312 (9th Cir.1990).” Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372, 1378 (9<sup>th</sup> Cir. 1998).

“[I]f the cumulative impact of a given project and other planned projects is significant, an applicant cannot simply prepare an EA for its project, issue a FONSI, and ignore the overall impact of the project.” Kern v. U.S. Bureau of Land Management, 284 F.3d 1062, 1076 (9<sup>th</sup> Cir. 2002). “An agency cannot avoid its statutory responsibilities under NEPA merely by asserting that an activity it wishes to pursue will have an insignificant effect on the environment. The agency must supply a convincing statement of reasons why potential effects are insignificant.” Public Service Co. of Colorado v. Andrus, 825 F.Supp. 1483, 1496 (D. Idaho 1993) *citing* The Steamboaters v. FERC, 759 F.2d 1383, 1393 (9<sup>th</sup> Cir. 1985). “[T]o prevail on the claim that the federal agencies were required to prepare an EIS, the plaintiffs need not demonstrate that significant effects will occur. A showing that there are ‘*substantial questions* whether a project **may** have a significant effect’ on the environment is sufficient.” Anderson v. Evans, 371 F.3d 475, 488 (9<sup>th</sup> Cir. 2004) (*italics* in original, **bold** emphasis added, citations omitted). *See also* Western Land Exchange Project v. BLM, 315 F.Supp.2d 1068, 1087 (D. Nev. 2004)(same).

The [agency] cannot avoid preparing an EIS by making conclusory assertions that an activity will have only an insignificant impact on the environment. *See* Alaska Ctr. for Env't v. United States Forest Serv., 189 F.3d 851, 859 (9th Cir.1999). If an agency, such as the Corps, opts not to prepare an EIS, it must put forth a “convincing statement of reasons” that explain why the project will impact the environment no more than insignificantly. Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1212 (9th Cir.1998). This account proves crucial to evaluating whether the Corps took the requisite “hard look” at the potential impact of the dock extension. *Id.*

“[A]n EIS *must* be prepared if ‘substantial questions are raised as to whether a project ... *may* cause significant degradation of some human environmental factor.’ ” Idaho Sporting Cong. v. Thomas, 137 F.3d 1146, 1149 (9th Cir.1998) (quoting Greenpeace Action v. Franklin, 14 F.3d 1324, 1332 (9th Cir.1992)). “To trigger this requirement a ‘plaintiff need not show that significant effects *will in fact occur*,’ [but] raising ‘substantial questions whether a project may have a significant effect’ is sufficient.” *Id.* at 1150 (quoting Greenpeace, 14 F.3d at 1332).

The Council on Environmental Quality has adopted regulations governing the implementation of NEPA. In determining whether a federal action requires an EIS

because it significantly affects the quality of the human environment, an agency must consider what “significantly” means. The regulations give it two components: context and intensity. 40 C.F.R. § 1508.27. Context refers to the setting in which the proposed action takes place, in this case Cherry Point. *See id.* § 1508.27(a). Intensity means “the severity of the impact.” *Id.* § 1508.27(b).

In considering the severity of the potential environmental impact, a reviewing agency may consider up to ten factors that help inform the “significance” of a project, such as the unique characteristics of the geographic area, including proximity to an ecologically sensitive area; whether the action bears some relationship to other actions with individually insignificant but cumulatively significant impacts; the level of uncertainty of the risk and to what degree it involves unique or unknown risks; and whether the action threatens violation of an environmental law. *Id.* § 1508.27(b)(3), (5), (7), (10). We have held that one of these factors may be sufficient to require preparation of an EIS in appropriate circumstances. *See Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 731 (9th Cir.2001).

*Ocean Advocates v. U.S. Army Corps of Engineers*, 402 F.3d 846, 864-65 (9<sup>th</sup> Cir. 2005)(EA and FONSI inadequate when agency fails to prepare adequate cumulative impacts analysis) (emphasis in original).

Thus, in this case, the agency’s failure to fully review all direct, indirect, and cumulative impacts renders the EA deficient. As such, the USFS cannot issue a FONSI. Without the required review of baseline information, and the potential direct, indirect, and cumulative impacts of the Project, any decision not to prepare an EIS is without sufficient evidentiary support.

#### IV. FAILURE TO FULLY REVIEW ALL DIRECT AND INDIRECT IMPACTS AND REQUIRE THE NECESSARY PERMIT REVIEWS.

In addition to the Draft EA’s failure to review all direct, indirect, and cumulative impacts, the agency failed to review all direct and indirect impacts from the Project. For example, for water quality, the USFS largely defers to future Arizona permitting reviews:

AMI will operate in accordance with the requirements of an Arizona Pollution Discharge Eliminating System (AZPDES) Construction General Permit (CGP). Per Arizona Department of Environmental Quality’s (ADEQ) De Minimus CGP program, AMI will develop and implement a stormwater pollution prevention plan (SWPPP) to minimize and manage stormwater. The SWPPP will describe the best management practices (BMPs) including sediment/erosion control, good housekeeping, maintenance, inspections, and any required monitoring. SWPPP requirements will be incorporated into all phases and a copy of the SWPPP will be maintained at the staging area.

Draft EA at 15. Despite the USFS’ reliance on the future stormwater plan, no public review under NEPA has been provided. Because NEPA does not apply to the State of Arizona’s review of the Project, the public’s rights under NEPA cannot be deferred to the State.

“A non-NEPA document – let alone one prepared and adopted by a state government-cannot



satisfy a federal agency's obligations under NEPA. *Klamath-Siskiyou Wildlands Center v. BLM*, 387 F.3d 989, 998 (9th Cir.2004).” *South Fork Band Council v. Dept. of Interior*, 588 F.3d 718, 726 (9th Cir. 2009). The same NEPA violation was found in *Klamath-Siskiyou*, 387 F.3d at 998, where the Ninth Circuit rejected as “without merit” identical arguments that an agency may excuse itself from its NEPA hard look duty where a “facility operates pursuant to a state permit under the Clean Air Act.”

Further, the USFS has a separate and independent duty to ensure that all water quality requirements and standards are met – under the CWA, Organic Act, and Part 228 regulations. See *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1153 (9<sup>th</sup> Cir. 1998). See also *Marble Mountain Audubon Soc’y v. Rice*, 914 F.2d 179, 182-83 (9<sup>th</sup> Cir. 1990); *Oregon Natural Resources Council v. Lyng*, 882 F.2d 1417, 1424-25 (9<sup>th</sup> Cir. 1989); *Hells Canyon Presv. Council v. Haines*, 2006 WL 2252554, \*4-5 (D. Or. 2006)(USFS mine approvals must comply with CWA standards).

Although Arizona has its own water quality mandates, the USFS cannot delegate-away what Congress has entrusted with the USFS regarding operations on public lands (and operations approved by the USFS with off-site impacts). The fact that Arizona may issue permits for these activities does not eliminate the USFS’s independent duties under the CWA, Organic Act/Part 228 and NEPA.

Regarding the actual discharges from the Project, there are additional water quality concerns that have not been adequately addressed. For example, there is no mention or consideration of the fact that the USFS must require AMI to obtain NPDES permit coverage for the sediment and other pollutants discharged from the road culverts and other water management structures. As the Ninth Circuit has stated:

Further, the term man-made “conveyance,” the essential trigger for finding a “point source” under the CWA, is broadly defined. [W]hen stormwater runoff is collected in a system of ditches, culverts, and channels and is then discharged into a stream or river, there is a “discernable, confined and discrete conveyance” of pollutants, and there is therefore a discharge from a point source. In other words, runoff is not inherently a nonpoint or point source of pollution. Rather, it is a nonpoint or point source under § 502(14) depending on whether it is allowed to run off naturally (and is thus a nonpoint source) or is collected, channeled, and discharged through a system of ditches, culverts, channels, and similar conveyances (and is thus a point source discharge).

*Northwest Environmental Defense Center v. Brown*, 640 F.3d 1063, 1070-71 (9<sup>th</sup> Cir. 2011) (culverts directing stormwater flows are point sources subject to NPDES permitting) *overturned on other grounds* *Decker v. Nw. Env’tl. Def. Ctr.*, 133 S.Ct. 1326 (2013). The Ninth Circuit recently reiterated, in light of the Supreme Court’s and its previous decision in those cases, that:

The Court left intact our holding that “when stormwater runoff is collected in a system of ditches, culverts, and channels and is then discharged into a stream or river, there is a ‘discernable, confined and discrete conveyance’ of pollutants, and

there is therefore a discharge from a point source” within the meaning of the Clean Water Act's basic definition of a point source in 33 U.S.C. § 1362(14).

Northwest Environmental Defense Center v. Decker, 728 F.3d 1085-86 (9<sup>th</sup> Cir. 2013). Without the required CWA permits (and Section 401 Certification), the USFS cannot approve the Plan of Operations. See Dubois v. U.S. Dept. of Agriculture, 102 F.3d 127, 1300 (1st Cir. 1996) (“the Forest Service was obligated to assure itself that an NPDES permit was obtained before permitting the [requested activity].”).

Also regarding water quality, there is no assurance that all waters have received the required protections. As the Draft EA acknowledges:

ADEQ determined that specific portions of Harshaw Creek qualified under the 303[d] list for impaired waters. In 2003, the ADEQ conducted sampling to help develop the Total Maximum Daily Load (TMDL) on Harshaw Creek (ADEQ, 2003). The primary tributary to the listed portion of Harshaw Creek is from an un-named canyon containing the Endless Chain Mine (ADEQ, 2003). The ADEQ divided Upper Harshaw Creek into three sections:

1. The headwaters and uppermost tributaries occupied by the Morning Glory Mine area. The Endless Chain Tributary, which consists of the mine and mill site, and an undisturbed basin.
2. The middle portion is between the mouth of the Endless Chain tributary and the Trench Camp Mine, which is in the area of the Augusta Mine, Blue Nose Mine, and several other small unnamed mines.
3. The lower portion of the Creek includes the dump number 3 of the Trench Camp Mine and a spring near the downstream end of the reach.

The headwaters and middle portions are not within the Hermosa project area. Three miles of the lower portion of Upper Harshaw Creek (referenced by number 3 above) is considered impaired because cadmium and pH exceeded drinking water standards in 1996 and 1998. Some of this lower portion is within the project area (Figure 8).

Draft EA at 69. Yet the Draft EA contains no assurances that the Project will comply with the restrictions in the TMDL, as the Clean Water Act contains strict prohibitions against any additional pollutant discharge into impaired waters without a rigorous compliance plan in place. Friends of Pinto Creek v. EPA, 504 F.3d 1007, 1012-13 (9<sup>th</sup> Cir. 2007).

## V. THE REVISED DRAFT EA OR EIS MUST INCLUDE AN ADEQUATE MITIGATION PLAN UNDER NEPA

Under NEPA, the agency must have an adequate mitigation plan to minimize or eliminate all potential project impacts. NEPA requires the agency to: (1) “include appropriate mitigation measures not already included in the proposed action or alternatives,” 40 CFR § 1502.14(f); and (2) “include discussions of: . . . Means to mitigate adverse environmental impacts (if not already covered under 1502.14(f)).” 40 CFR § 1502.16(h). NEPA regulations define “mitigation” as a way to avoid, minimize, rectify, or compensate for the impact of a potentially harmful action. 40 C.F.R. §§1508.20(a)-(e). “[O]mission of a reasonably complete discussion of possible mitigation measures would undermine the ‘action-forcing’ function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects.” Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 353 (1989).

NEPA requires that the agency discuss mitigation measures, with “sufficient detail to ensure that environmental consequences have been fairly evaluated.” Methow Valley, 490 U.S. at 352, 109 S.Ct. 1835.

An essential component of a reasonably complete mitigation discussion is an assessment of whether the proposed mitigation measures can be effective. Compare Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372, 1381 (9th Cir.1998) (disapproving an EIS that lacked such an assessment) with Okanogan Highlands Alliance v. Williams, 236 F.3d 468, 477 (9th Cir.2000) (upholding an EIS where “[e]ach mitigating process was evaluated separately and given an effectiveness rating”). The Supreme Court has required a mitigation discussion precisely for the purpose of evaluating whether anticipated environmental impacts can be avoided. Methow Valley, 490 U.S. at 351–52, 109 S.Ct. 1835(citing 42 U.S.C. § 4332(C)(ii)). A mitigation discussion without at least some evaluation of effectiveness is useless in making that determination.

South Fork Band Council v. Dept. of Interior, 588 F.3d 718, 727 (9th Cir. 2009)(emphasis added)(rejecting EIS for failure to conduct adequate review of mitigation and mitigation effectiveness in mine EIS). “The comments submitted by [plaintiff] also call into question the efficacy of the mitigation measures and rely on several scientific studies. In the face of such concerns, it is difficult for this Court to see how the [agency’s] reliance on mitigation is supported by substantial evidence in the record.” Wyoming Outdoor Council v. U.S. Army Corps of Eng’rs, 351 F. Supp. 2d 1232, 1251 n. 8 (D. Wyo. 2005). *See also* Dine Citizens v. Klein, 747 F.Supp.2d 1234, 1258-59 (D. Colo. 2010) (finding “lack of detail as the nature of the mitigation measures” precluded “meaningful judicial review”).

Here, the Draft EA either fails to adequately discuss mitigation at all, or if it does, fails to analyze the effectiveness of each mitigation measure. For example, to reduce impacts to the ESA protected Lesser long-nosed bat which forages on Agave plants, the Draft EA lists as required design feature “[a]ny Agave plants that must be removed for project activities shall be transplanted.” Draft EA at 25 (BIO-2). Elsewhere the in discussing other USFS Sensitive plant species, the Draft EA, states “[i]f individuals cannot be avoided, they should be transplanted.” Draft EA at 26 (VEG 3). Yet, the Draft EA neither discusses, nor analyzes the potential

effectiveness of this transplantation mitigation design feature – i.e. how likely are transplanted Agave plants or other USFS Sensitive plants to survive transplantation?

Because the Draft EA fails to discuss how likely proposed or required mitigation measures are to reduce impacts, as well as any environmental impacts from any mitigation measure, it violates NEPA. The revised Draft EA or EIS must correct these errors.

## VI. THE REVISED DRAFT EA OR EIS MUST FULLY REVIEW ALL REASONABLE ALTERNATIVES

NEPA requires the agency to “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources.” 42 U.S.C. § 4332(E); 40 CFR § 1508.9(b). It must “rigorously explore and objectively evaluate all reasonable alternatives” to the proposed action. City of Tenakee Springs v. Clough, 915 F.2d 1308, 1310 (9<sup>th</sup> Cir. 1990). The alternatives analysis –is considered the heart of a NEPA analysis. 40 C.F.R. § 1502.14. The alternatives analysis should present the environmental impacts in comparative form, thus sharply defining important issues and providing the public and the decisionmaker with a clear basis for choice. Id. The lead agency must “rigorously explore and objectively evaluate all reasonable alternatives” including alternatives that are “not within the [lead agency’s] jurisdiction.” Id.

Even if an EA leads to a FONSI, it is essential for the agency to consider all reasonable alternatives to the proposed action. One of the Ninth Circuit’s leading EA/alternatives decisions states:

NEPA requires that federal agencies consider alternatives to recommended actions whenever those actions “involve[ ] unresolved conflicts concerning alternative uses of available resources.” 42 U.S.C. § 4332(2)(E) (1982). The goal of the statute is to ensure “that federal agencies infuse in project planning a thorough consideration of environmental values.” The consideration of alternatives requirement furthers that goal by guaranteeing that agency decisionmakers “[have] before [them] and take [ ] into proper account all possible approaches to a particular project (*including total abandonment of the project*) which would alter the environmental impact and the cost-benefit balance.” NEPA’s requirement that alternatives be studied, developed, and described both guides the substance of environmental decisionmaking and provides evidence that the mandated decisionmaking process has actually taken place. Informed and meaningful consideration of alternatives--including the no action alternative-- is thus an integral part of the statutory scheme.

Moreover, consideration of alternatives is critical to the goals of NEPA even where a proposed action does not trigger the EIS process. This is reflected in the structure of the statute: while an EIS must also include alternatives to the proposed action, 42 U.S.C. § 4332(2)(C)(iii) (1982), the consideration of alternatives requirement is contained in a separate subsection of the statute and therefore constitutes an independent requirement. *See id.* § 4332(2)(E). The language and effect of the two subsections also indicate that the consideration of alternatives requirement is of wider scope than the EIS requirement. The

former applies whenever an action involves conflicts, while the latter does not come into play unless the action will have significant environmental effects. An EIS is required where there has been an irretrievable commitment of resources; but unresolved conflicts as to the proper use of available resources may exist well before that point. Thus the consideration of alternatives requirement is both independent of, and broader than, the EIS requirement.

Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1228-1229 (9<sup>th</sup> Cir. 1988) (citations omitted, emphasis in original). “While a federal agency need not consider all possible alternatives for a given action in preparing an EA, it must consider a range of alternatives that covers the full spectrum of possibilities.” Ayers v. Espy, 873 F.Supp. 455, 473 (D. Colo. 1994).

In this case, the revised Draft EA or EIS must consider, at a minimum, the following reasonable alternatives: (1) approval of only the baseline-gathering activities; (2) access to each activity without the construction of new or improved roads; (3) reduction in the amount, scope, and impact of each activity or group of activity (such as initial reduced-scale phased drilling); (4) additional timing restrictions to protect wildlife.

## VII. THE FOREST SERVICE FAILED TO MINIMIZE ALL ADVERSE IMPACTS FROM THE PROJECT

On the National Forests, the Organic Act requires the Forest Service “to regulate their occupancy and use and to preserve the forests thereon from destruction.” 16 U.S.C. § 551. “[P]ersons entering the national forests for the purpose of exploiting mineral resources must comply with the rules and regulations covering such national forests.” Clouser v. Espy, 42 F.3d 1522, 1529 (9<sup>th</sup> Cir. 1994).

The USFS mining regulations require that “all [mining] operations shall be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest resources.” 36 C.F.R. § 228.8. In addition, the operator must fully describe “measures to be taken to meet the requirements for environmental protection in § 228.8.” 36 C.F.R. 228.4(c)(3). “Although the Forest Service cannot categorically deny a reasonable plan of operations, it can reject an unreasonable plan and prohibit mining activity until it has evaluated the plan and imposed mitigation measures.” Siskiyou Regional Education Project v. Rose, 87 F. Supp. 2d 1074, 1086 (D. Or. 1999), citing Baker v. U.S. Dept. of Agriculture, 928 F.Supp. 1513, 1518 (D. Idaho 1996). “This court does not believe the law supports the Forest Service’s concession of authority to miners under the General Mining Act in derogation of environmental laws and regulations.” Hells Canyon Preservation Council v. Haines, 2006 WL 2252554, at \*6 (D. Or. 2006)(finding violation of Organic Act in Forest Service’s failure to minimize adverse impacts to streams).

In addition to ensuring compliance with all applicable environmental standards (which has not been shown here due to the inadequate NEPA compliance), the USFS has a mandatory duty to require “all practicable measures to maintain and protect fisheries and wildlife habitat which may be affected by the operations” under 36 CFR § 228.8(e)). See Rock Creek Alliance v. Forest

Service, 703 F.Supp.2d 1152, 1170 (D. Montana 2010) (Forest Service violated Organic Act and 228 regulations by failing to protect water quality and fisheries in approving mining PoO).

Importantly, a simple and generalized reduction of impacts does not equate to the strict requirements for minimization of impacts and protection of resources. The Forest Service's duty to minimize impacts is not met simply by somewhat reducing those impacts. Trout Unlimited v. U.S. Dep't. of Agriculture, 320 F.Supp.2d 1090, 1110 (D. Colo. 2004). In interpreting the Federal Land Policy and Management Act (FLPMA)'s duty on the agency to "minimize damage to ... fish and wildlife habitat and otherwise protect the environment," 43 U.S.C. § 1765(a), the court specifically stated the agency's finding that mitigation measures would "reasonably protect" fisheries and habitat failed to meet its duty to "minimize" impacts. Id.

The agency must demonstrate that all feasible means have been required to minimize all adverse impacts to all potentially affected resources. For example, the Ninth Circuit Court of Appeals recently held that the Forest Service had the authority to strictly limit mining claimants' vehicular access to mining claims. Public Lands for the People v. U.S. Dept. of Agriculture, 697 F.3d 1192 (9<sup>th</sup> Cir. 2012). As held by the court:

The Secretary of Agriculture has the right to restrict motorized access to specified areas of the national forests, including mining claims. [Clouser v. Espy, 42 F.3d at 1530 (citing 16 U.S.C. § 551)] (means of access "may be regulated by the Forest Service"). More specifically, we have upheld Forest Service decisions restricting the holders of mining claims to the use of pack animals or other non-motorized means to access their claims. Id. at 1536-38. Relatedly, we have rejected the contention that conduct "reasonably incident[al]" to mining could not be regulated. United States v. Doremus, 888 F.2d 630, 632-33 (9<sup>th</sup> Cir. 1989). Our precedent thus confirms that the Forest Service has ample authority to restrict motor vehicle use within the ENF [El Dorado National Forest].

Id. at 1197. Thus, in this case, in order to minimize all adverse impacts, the agency must, among other restrictions to protect wildlife and the environment, limit project activities to existing roads. Also, as noted herein, the agency must fully consider such limitations as reasonable alternative(s) under NEPA. Additionally, to reduce cumulative impacts to wildlife species that are sensitive to light, noise, and other human activities incidental to mineral exploration, the USFS should consider the timing of the project in relation to other adjacent or nearby mineral projects and consider imposing timing restrictions so that these multiple projects in the same general area occur sequentially rather than at the same time.

#### VIII. USFS ANALYSIS OF THE PROJECT'S IMPACTS TO THREATENED AND ENDANGERED SPECIES VIOLATES NEPA.

NEPA requires that the USFS fully disclose the Project's impacts on all affected threatened and endangered species and their designated critical habitats. *See* 40 C.F.R. § 1508.27(b)(9). Impacts to threatened or endangered species short of "jeopardy" or the "destruction or adverse modification of critical habitat" (the standard used under Section 7 of the ESA, 16 U.S.C. § 1536(a)(2)) may still be significant and must be examined under NEPA. At present, the USFS has not yet engaged in the ESA Section 7 consultation process with the U. S. Fish and Wildlife

Service (FWS). Draft EA at 44 (“Consultation with the USFWS on species determinations has not yet been initiated.”). However, the biological assessment that USFS provides in the Draft EA, Table 16 at 52-3, is premised entirely on the idea that if the proposed Project will not jeopardize a listed species’ continued existence or destroy or adversely modify its critical habitat then no further analysis of impacts is necessary. This is a legal error. NEPA requires analysis and discussion of all significant impacts, and impacts to threatened and endangered species that do not cross the Section 7 prohibition under the ESA may still be significant under NEPA and must be analyzed.

Additionally, because USFS has not yet begun, much less completed, ESA Section 7 consultation, neither the public nor agency decision-makers have the benefit of FWS’ expert opinion on the effects of the proposed Project to threatened or endangered species and cannot determine if USFS’ effects determination, Draft EA, Table 16, at 52-3, will be endorsed by FWS or whether that agency will disagree with USFS’ determinations. USFS’ failure to engage in ESA consultation and obtain a biological opinion from FWS thus inhibits the public’s ability to effectively comment on the Draft EA. The USFS should re-circulate the Draft EA for additional public comment once it engages in ESA consultation with FWS and the public can then be informed what the Project’s actual impacts to threatened and endangered species will be in the view of the expert agency charged with protecting those species. At present, the public and USFS decision makers have been provided with only half the story – the potentially prejudiced or understated opinion of what the project proponent and its hired consultants think about the Project’s impacts on threatened and endangered species.

NEPA demands agency transparency in its decision-making through public involvement. Baltimore Gas & Electric v. NRDC, 462 U.S. 87, 97 (1983); Kern v. BLM, 284 F.3d 1062, 1073 (9<sup>th</sup> Cir. 2002). “By focusing both agency and public attention on the environmental effects of proposed actions, NEPA facilitates informed decision-making by agencies and allows the political process to check those decisions.” New Mexico v. BLM, 565 F.3d 683, 703 (10<sup>th</sup> Cir. 2009). “An agency, when preparing an EA, must provide the public with sufficient environmental information, considered in the totality of the circumstances, to permit the members of the public to weigh in with their views and thus inform the agency decision-making process.” Bering Strait Citizens for Responsible Resource Development v. U.S. Army Corps of Engineers, 524 F.3d 938, 953 (9<sup>th</sup> Cir. 2008). NEPA’s procedural safeguards instruct that (1) environmental information be made available to the public *before* decisions are made and *before* action is taken, and (2) direct that this information be of “high quality,” meaning that it “must concentrate on the issues that are truly significant to the action in question.” 40 C.F.R. § 1500.1(b). The potential impacts to threatened and endangered species are among the most serious impacts posed by the Hermosa Drilling Project. Accordingly, they are “significant to the action in question.” Additionally, FWS’ expert opinion on the actual manner and extent of these impacts (as opposed to the mining company’s consultant’s opinion) represents “high quality” information.

The FWS’ biological opinion is presently missing from the Draft EA and not available to the public. Accordingly, to allow the public to comment effectively on the Draft EA before decisions are made and before action is taken, USFS must re-circulate its EA for additional public

comment when the “high quality” information provided by the ESA Section 7 consultation process is available.

Finally, it is important to note that the NEPA process provides the public with its only opportunity to review the ESA Section 7 consultation process via public comment because unlike the NEPA process, the ESA Section 7 consultation process itself is “private” between USFS and FWS and will not involve public comment. The public’s only opportunity to “weigh in” on the impacts to threatened and endangered species via public comment occurs during the NEPA process – rendering the USFS’ compliance with NEPA that much more critical in this instance as otherwise the public will not be afforded an opportunity to review and comment on FWS’ position as to the Project’s impacts on threatened and endangered species. See New Mexico, 565 F.3d at 704 (highlighting the importance of “informed public comment”) and Id. at 708 (holding inadequate public comment is not harmless).

#### IX. THE FOREST SERVICE’S APPROVAL OF THE PROJECT FAILS TO COMPLY WITH THE ENDANGERED SPECIES ACT AND RELATED REQUIREMENTS

The Draft EA provides a table listing 12 ESA listed, Candidate, and Proposed Species that may be present with the Project area. Draft EA, Table 14, at 44-46. The Draft EA also provides a second table based on a biological assessment prepared by Tetra Tech (2014c) that summarizes the determination of effects on these 12 ESA listed, Candidate, and Proposed Species. Draft EA, Table 16, at 52-53. These species are discussed in turn below. As a general matter for each ESA listed species, prior to proceeding with the Project, USFS must comply with the ESA Section 7 consultation requirements in 16 U.S.C. § 1536(a)(2). For each ESA Proposed Species, prior to proceeding with the Project, USFS must comply with the ESA Section 7 conference requirements in 16 U.S.C. § 1536(a)(4). ESA Candidate species receive no protection under the ESA. However, impacts to Candidate species must still be considered under NEPA (and protected under the USFS’s duties to require “all practicable measures to maintain and protect fisheries and wildlife habitat which may be affected by the operations” under 36 CFR § 228.8(e)). In addition ESA Candidate species could become Proposed species or be listed during the course of the Project and thus would require a conference (if proposed for listing) or consultation (if listed). See 50 C.F.R. § 402.16(d) (requiring reinitiation of formal consultation when a new species is listed or critical habitat is designated). Further, for all species, the Draft EA’s reliance on the six-month duration of active operations as justification for its findings of little to no impacts to wildlife is inaccurate and misleading. As the PoO and Draft EA acknowledge, reclamation activities (including use of heavy equipment, roads, etc.) will occur for up to two years. See Draft EA at 8. As such, all impact analysis should have been based on at least a two-year time frame for activities.

##### Arizona tree frog

Table 14 in the Draft EA indicates the Arizona tree frog (*Hyla wrightorum*) is an ESA candidate species which may occur in the Project area, but that no individuals or populations of this species were detected in the Project area during 2012 field surveys. Draft EA at 44. However, because the Draft EA states the “Project area contains suitable habitat” for the Arizona tree frog, the agency cannot discount the possibility that the species does occur in the area, which is only 12 miles from known occurrences of the Arizona tree frog in the Canelo Hills. Draft EA, Table 14,



at 44. More importantly, the agency cannot discount the possibility that the “suitable habitat” in the Project area might be essential to the conservation or recovery of the species, even if currently unoccupied, and thus appropriate for designation as unoccupied critical “recovery” habitat if the species is listed. Accordingly, the USFS’ conclusion that the Project is “not likely to jeopardize the continued existence” of the Arizona tree frog, Draft EA, Table 16, at 52, appears largely unsupported. The appropriate question for purposes of the NEPA analysis and the ESA analysis at this juncture is what are the effects of the Project on the Arizona tree frog and its suitable habitat in the Project area?

However, because, as discussed above, the USFS lacks an adequate cumulative impacts analysis as well as baseline data on groundwater conditions or the relationship between groundwater and surface water, the Draft EA’s bold conclusion that the Project would not affect springs, stock ponds, or perennial waters is completely unsupported by any analysis in the Draft EA itself or the Draft Biological Assessment. *See* Draft EA, Table 16, at 52.

#### Chiricahua leopard frog

Table 14 in the Draft EA indicates the Chiricahua leopard frog (*Lithobates chiricahuensis*) is listed as Threatened and does have designated critical habitat. Draft EA, Table 14, at 44-5. However, the Draft EA further indicates that no designated critical habitat is found in the action area, but that the “Project area contains suitable habitat” and the species is “[k]nown to occur within 1 mile of the project area.” *Id.* The Draft EA further indicates that no Chiricahua leopard frog individuals or populations were detected in the project area during 2012 field surveys. Nonetheless, because suitable habitat for this species exists in the Project area and the species is known to occur within one mile of the Project area, the possibility that undetected individual members of this species or populations exist in the Project area cannot be discounted. More importantly, the suitable habitat in the Project area could be important to the species’ conservation and recovery. The Draft EA acknowledges that the Project may affect but is not likely to adversely affect this species because the Project will not affect springs, stock ponds, or perennial waters and thus would not result in a loss of suitable habitat. *Id.*

However, because as discussed above, the USFS lacks an adequate cumulative impacts analysis as well as baseline data on groundwater conditions or the relationship between groundwater and surface water in the Project area, this conclusion appears unsupported by any analysis in the Draft EA itself or the Draft Biological Assessment. *See* Draft EA, Table 16, at 52.

#### Sonora tiger salamander

The Sonora tiger salamander (*Ambystoma tigrinum stebbinsi*) is listed as endangered, but it lacks a designated critical habitat. Draft EA, Table 14, at 45. It is known to occur in the Project area. *Id.* The Draft EA indicates that the Project area contains suitable habitat for the Sonora tiger salamander, that the salamander is both known to occur within one mile of the Project area, and more importantly, that Sonora tiger salamanders were detected at two locations in the action area during 2012 field surveys. *Id.* One of these two detections found 39 Sonora tiger salamanders in various life stages. Tetra Tech 2014c at 28 (Draft Biological Assessment). The Draft EA does not disclose that during 2013 surveys Sonora tiger salamanders were documented at four of the 26 aquatic features surveyed in the action area. *Id.* Two of these four 2013 detections showed

evidence of breeding (eggs and larvae). *Id.* Accordingly, the Draft EA understates the evidence of the presence of Sonora tiger salamanders in the Project area and should be corrected to reflect the actual evidence (four as opposed to two detections, with evidence of reproduction at two sites).

Nonetheless, despite the evidence of the presence of the species, including breeding populations, in the action area, the USFS concludes the Project may affect but is not likely to adversely affect this species because the Project will not affect springs, stock ponds, or perennial waters and thus would not result in a loss of suitable habitat. Draft EA, Table 16, at 52.

However, because as discussed above, the USFS lacks an adequate cumulative impacts analysis as well as baseline data on groundwater conditions or the relationship between groundwater and surface water in the Project area, this conclusion appears unsupported by any analysis in the Draft EA itself or the Draft Biological Assessment. *See* Draft EA, Table 16, at 52.

In addition, because this species is present in the area, it could be directly encountered and harmed during mineral exploration activities. As the Draft Biological Assessment acknowledges, “[a]fter metamorphosing, terrestrial adults utilize the surrounding upland grassland and oak woodlands.” Tetra Tech 2014c at 48. Thus, the USFS’ conclusion the Project will not impact springs, stock ponds, or perennial waters is insufficient to support a conclusion the Project will not adversely affect the Sonora tiger salamander. USFS must analyze the Project’s impacts on “surrounding upland grassland and oak woodlands” also used by the species.

#### Mexican spotted owl

The Mexican spotted owl (*Strix occidentalis lucida*) is listed as threatened and has designated critical habitat. Draft EA, Table 14, at 45. The Draft EA indicates the species may occur in the Project area and that there is designated critical habitat in the Project area. *Id.* The Draft EA, further indicates the species is known to occur within one mile of the Project area and was detected at two locations during 2012 field surveys. *Id.* The Draft Biological Assessment, Tetra Tech 2014c, indicates that no Mexican spotted owls were detected in the action area during the 2012 or 2013 field surveys, but that the Humboldt Canyon Protected Activity Center (PAC) was occupied in 2012. Tetra Tech 2014c at 32.

In analyzing the effects of the proposed Project on the Mexican spotted owl and its designated critical habitat, the Draft Biological Assessment opines that “[p]ortions of the project are located within designated critical habitat (unit BR-W-14) for the Mexican spotted owl [but that] [n]ot all areas within the critical habitat boundaries have habitat elements important to this species.” Tetra Tech 2014c at 52. This statement appears to be an inappropriate “collateral attack” on the designated critical habitat for this species. By definition, all designated critical habitat has been determined by FWS, the expert agency, to be “essential to the conservation of the species.” 16 U.S.C. § 1532(5)(A) (definition of critical habitat). Accordingly, the USFS should not reach conclusions based on a derogation of the importance of some areas within the designated critical habitat boundaries.

The Draft Biological Assessment further states that “[h]uman activity in or near nesting, roosting, or foraging sites may result in abandonment of an area as well as indirectly affect

habitat parameters from trampling, vegetation removal, or increased fire risk.” Terta Tech 2014c at 53. The Draft Biological Assessment acknowledges that “[t]here will be additional human activity in the action area, which does contain designated critical habitat,” and that this additional human activity “could cause abandonment of nests.” *Id.* However, the Draft Biological Assessment then states that “the nearest known nesting sites are more than 0.5 miles from any proposed activity locations.” *Id.* There is no further analysis, but the Draft Biological Assessment appears to imply that no impacts to the Owl or its designated critical habitat are anticipated because the nearest nesting site is a half-mile from proposed activity locations.

This implied conclusion is unsupported. There is no discussion of what is meant by “near” a nesting site. It is quite possible that for a relatively wide ranging species like the Mexican spotted owl, increased human activity within a half-mile of a nesting location does qualify as “near” or within the Owl’s usual foraging area – or may include a roosting area. The Draft Biological Assessment’s conclusion that no PCE’s of the designated critical habitat will be effected because no trees greater than 12 inches dbh will be removed, *Id.*, is also unsupported. Human activity near a nesting or roosting affects the Owl not only if large trees are removed but if habitat parameters are trampled, prey species affected, and so on. Large tree removal is not the only possible vector for impacts to the Owl, as the Draft Biological Assessment also notes that lighting and noise may impact the Owl. Accordingly, the Draft EA’s conclusion that the Project “may affect [but is] not likely to adversely affect [the Mexican spotted owl and would] have no effect on designated critical habitat,” Draft EA, Table 16, at 52, is largely unsupported. The Draft EA attempts to support this conclusion by stating “[p]referable Mexican spotted owl nesting, roosting, and foraging habitat is available external to the project area [and] the three Protected Activity Centers are more than 0.5 miles from the project area.” Draft EA, Table 16, at 53. (This reference to three PAC’s as opposed to the single Humboldt Canyon PAC, discussed in the Draft Biological Assessment is not elaborated upon and it is unclear what other PAC’s are being referenced.) However, as discussed above, without any further analysis the use of the half-mile distance to discount any impacts to the Owl is arbitrary. More importantly, the existence of habitat “external to the project area” – does not serve as an analysis of whether designated critical habitat in the Project area is being adversely modified or destroyed as required by Section 7 of the ESA. At a minimum, turning designated critical habitat into drill pads, pits, etc. must be considered “destroying” critical habitat, and critical habitat whose “habitat parameters” are trampled, have vegetation removed, or which are subjected to increased fire risk, should be considered “adversely modified.” The USFS’ conclusion that the Project will have no effect on designated critical habitat within its boundaries does not withstand analysis.

Additionally, as discussed above, because other projects, notably the Sunnyside project will take place in Mexican spotted owl habitat “external to the project site” – (see discussion of cumulative impacts above) – USFS cannot rely on this habitat “external to the project site” as providing a refuge from impacts to resident Owls.

### Yellow-billed cuckoo

The Draft EA indicates the Yellow-billed cuckoo (*Coccyzus americanus*) is proposed for listing as a threatened species. Draft EA, Table 14, at 45. Thus, at present, under the ESA USFS must only “confer,” as opposed to “consult” with FWS concerning the Project’s impacts to this species. See 16 U.S.C. § 1536(a)(4). FWS proposed to list the cuckoo as threatened on October

3, 2013, 78 Fed. Reg. 61622. Accordingly, pursuant to the deadlines established in Section 4 of the ESA, 16 U.S.C. § 1533, FWS must issue a final listing decision for this species by October 3, 2014, or in the case of remaining scientific uncertainty within six months thereafter. Additionally, FWS faces an obligation under the ESA to designate critical habitat for this species concurrently with its listing, or in the case critical habitat is not then determinable, within a year after listing. Accordingly, it is likely the cuckoo will be officially listed as threatened and will receive a critical habitat designation before the Project is completed. Because 50 C.F.R. § 402.16(d) requires the reinitiation of formal consultation on a Project when a new species is listed or critical habitat is designated, USFS may be forced to consult (as opposed to confer) with FWS regarding the Project's impacts to the cuckoo at some point in the near future and would be well advised to insure the Project avoids harming the cuckoo from the outset.

The Draft EA states the Project area contains suitable cuckoo habitat and that species is known to occur in the Project area. Draft EA, Table 14, at 45. "Individuals/populations of this species were detected at eight separate locations in the project area during the 2012 field surveys." *Id.* The Draft Biological Assessment expounds upon this limited information provided in the Draft EA. Tetra Tech 2014c at 35. The Draft Biological Assessment relates that during the 2012 field surveys Yellow-billed Cuckoos were detected in three areas along Harshaw Creek, three along Corral Canyon, and two along Hermosa Canyon. *Id.* In all three drainages the detections occurred within the riparian corridor. *Id.* However, in Hermosa Canyon the species was also detected on a hilltop outside the riparian area. In Coral Canyon, repeated detections within 984 feet (300 meters) of each other indicated a possible breeding territory in this area. *Id.* During the 2013 surveys yellow-billed cuckoos were detected along eight survey transects at a total of 46 separate locations. *Id.* Based on the methodology of two cuckoos exchanging calls at the same location, or multiple detections of cuckoos within 984 feet (300 meters) of each other across more than one survey period, seven possible breeding occurrences and two probable breeding occurrences were detected. *Id.* During both the 2012 and 2013 surveys cuckoo detections in the action area were associated with drainages containing mostly oak and juniper and with no perennial water source. *Id.*

Based on the more detailed information in the Draft Biological Assessment, the limited information provided in the Draft EA is misleading. The Draft EA does not discuss the much greater number of cuckoo detections in the 2013 survey as opposed to the 2012 survey (46 as opposed to 8 detections) and the Draft EA omits any information concerning the detection of possible breeding pairs in both surveys. See Draft EA, Table 14, at 45. This omission should be corrected, otherwise the EA misinforms the public and decision-makers as to the actual number of cuckoos in the Project area, and potential breeding pairs, that will be impacted by the Project. Such errors violate NEPA as well as the agency's wildlife protection duties discussed herein.

The Draft EA concludes that the Project is not likely to jeopardize the continued existence of the cuckoo because it will avoid removing trees greater than 12 inches dbh and all ground disturbing activities will maintain a 15 foot setback from the "active stream bank" which would limit impacts to potential breeding habitat. Draft EA, Table 16, at 52. The Draft EA also states "[t]he drilling operations are expected to take six months to complete so impacts to breeding behavior would not exceed one breeding season." *Id.*

This conclusion does not withstand analysis for multiple reasons. First, the preservation of trees greater than 12 inches dbh is a design feature to protect the Mexican spotted owl (see discussion above) not the cuckoo. The cuckoo is not an “old growth” dependent forest species, but a streamside vegetation dependent species. Streamside vegetation used by cuckoos is frequently less than 12 inches dbh. See 78 Fed. Reg. 61622. Second, a 15 foot setback from the “active stream bank” is a very minor protection. 15 feet is the length of a car. There is no evidence or discussion of whether cuckoos will continue to use areas, especially for breeding, within 15 feet of a drilling site or other construction activity. Moreover, as discussed above, the cuckoos detected in the Project area are using areas not associated with perennial water (and thus which may not be associated with an “active stream bank” however that term is subjectively defined). Finally, in the event the cuckoo is listed and/or its critical habitat is designated, the fact that drilling may take only six months and thus disrupt only one breeding season, does not mean that the Project will not adversely affect the cuckoo or adversely modify its critical habitat (at least temporarily).

The Draft Biological Assessment acknowledges that the cuckoo is threatened by habitat loss, modification, and degradation. Tetra Tech 2014c at 55. The Draft Biological Assessment then proceeds to analyze potential impacts to the detected cuckoo sites in Harshaw Creek and Corral Canyon. The Project proposes three “characterization sites” (i.e. industrial mineral exploration) along Harshaw Creek and ten characterization sites within Corral Canyon. Id. The Draft Biological Assessment states “[v]egetation removal associated with the project activities would remove small areas of potential habitat at each characterization site.” Id. This analysis largely misses the point – it is not the relatively small acreage of vegetation removed that is likely to influence Cuckoo occupation of these canyons – but the noise, light, and constant presence of human activity “set back” 15 feet from “active stream beds” – i.e. right in the cuckoo’s primary occupied habitat. The same document acknowledges, that “[n]ests in the disturbance areas may be abandoned due to noise from project activities.” Id. However, the Draft Biological Assessment minimizes this potential by stating “[a]lthough breeding was not document in the area during the 2012 surveys, it is possible the [cuckoo] may nest in the action area.” Id. This statement ignores the information (or inappropriately minimizes) the actual factual information contained in the same document – that the 2012 surveys discovered a possible breeding territory in Corral Canyon and the 2013 surveys (which are not mentioned at all) identified seven possible breeding occurrences and two probable breeding occurrences. Thus, the USFS’ analysis of possible impacts to the yellow-billed cuckoo in the Draft EA and the supporting analysis in the Draft Biological Assessment can only be described as disingenuous.

#### Gila topminnow

The Draft EA indicates the Gila topminnow (*Poeciliopsis occidentalis*) is listed as endangered but does not have designated critical habitat. Draft EA, Table 14, at 45. The Draft EA states the Gila topminnow may occur in the Project area and is known to occur within the 1-mile buffer of the action area and relates that the fish was stocked in Harshaw Creek in 1982, approximately three miles downstream of the action area, but is not currently known to occur in Harshaw Creek. The Draft Biological Assessment indicates that the Project will involve groundwater pumping for use during drilling, up to 432,00 gallons of groundwater will also be pumped for aquifer testing, and up to 2.8 million gallons for dust abatement, but that “it is not anticipated that groundwater pumping would reduce surface water that is providing Gila topminnow habitat.” Tetra Tech

2014c at 48. Presumably, based on this assumption, the Draft EA concludes the Project may affect, but is not likely to adversely affect, the Gila topminnow because the Project would not affect springs, stock ponds, or perennial waters and the nearest population of the Gila topminnow is downstream from the action area. Draft EA, Table 16, at 52. However, because as discussed above, the USFS lacks adequate cumulative impacts analysis and baseline data on groundwater conditions or the relationship between groundwater and surface water in the Project area, this conclusion appears unsupported by any analysis in the Draft EA itself or the Draft Biological Assessment and quite literally is nothing more than a hopeful “anticipation.”

Additionally, as to the Gila topminnow only being known to occur downstream of the Project area, the Draft Biological Assessment appears to conclude that no impacts will occur because the Project “does not include activities that will increase water pollution.” Tetra Tech 2014c at 48. This conclusion, without analysis, is similarly unsupported. The Project involves the drilling of 23 geotechnical boreholes, 10 exploration boreholes, 12 hydrological boreholes/monitoring wells, and excavating 15 test pits. Draft EA at 1. The Project also involves the construction of eight temporary roads (totaling 2.67 miles). *Id.* Contrary to the statement in the Draft Biological Assessment, nearly all of these activities have the potential to increase water pollution. Drilling machinery may leak or spill fuel, drilling by-products may escape into the environment, disturbed areas may exhibit increase run-off and produce additional sediment capable of entering streams. Run-off may also transport spilled fuel or other industrial materials into streams and road construction risks the same potential. It is simply incorrect to conclude that none of the Project activities may increase water pollution. Accordingly, the conclusion that no downstream water pollution may result from the Project is unsupported.

#### Huachuca springsnail

The Draft EA indicates the Huachuca springsnail (*Pyrgulopsis thompsoni*) is an ESA candidate species which may occur in the Project area, but that no individuals or populations of this species were detected in the Project area during 2012 field surveys. Draft EA, Table 14, at 45. However, because the Draft EA states that “[p]ortions of the project area contain suitable habitat” and that the species is known to occur in the San Rafael Valley, located to the east of the Project, the agency cannot discount the possibility that the species does occur in the Project area. *See* Draft EA, Table 14, at 45. More importantly, the agency cannot discount the possibility that the “suitable habitat” in the Project area might be essential to the conservation or recovery of the species, even if currently unoccupied, and thus appropriate for designation as unoccupied critical “recovery” habitat if the species is listed. Accordingly, the USFS’ conclusion that the Project is “not likely to jeopardize the continued existence” of the Huachuca springsnail, Draft EA, Table 16, at 52, appears largely unsupported.

The appropriate question for purposes of the NEPA analysis and the ESA analysis at this juncture is what are the effects of the Project to the springsnail and its suitable habitat in the Project area? The Draft Biological Assessment indicates the Huachuca springsnail is threatened by habitat loss (springs and cienegas) from overgrazing, timber harvest, *mining*, water impoundments/developments, *groundwater withdrawal*, and recreation. Tetra Tech 2014c at 46 (emphasis added). The Draft Biological Assessment acknowledges “[t]here will be groundwater withdrawal from the project activities, which may temporarily affect surface water, but the effects are anticipated to be negligible.” *Id.* While this acknowledgement – that the Project’s

groundwater withdrawals may temporary affect surface water is refreshing (and was absent from the Draft Biological Assessment's analysis of impacts to other aquatic species such as the Arizona tree frog, Chiricahua leopard frog, Sonora tiger salamander, and Gila topminnow), the following conclusion that the groundwater pumping will have negligible effects on surface water is unsupported because, as discussed above, USFS lacks baseline data on groundwater conditions or the relationship between groundwater and surface water in the Project area.

### Jaguar

The Draft EA indicates that the jaguar (*Panthera onca*) is listed as endangered and has a proposed critical habitat designation. Draft EA, Table 14, at 45. This proposed critical habitat designation was recently finalized. 79 Fed. Reg. 12572 (March 5, 2014). The Draft EA states the jaguar may occur in the Project area, that proposed (now final) critical habitat is located within the Project area, that the Project area contains suitable jaguar habitat, and that the species is known to occur within 1-mile buffer of the Project area. Draft EA, Table 14, at 45. The Draft EA concludes the Project may affect but is not likely to adversely affect the Jaguar and would not result in the destruction or adverse modification of its critical habitat because the Project would impact small, localized areas of habitat, but will not impact large tracks that would impede jaguar movement or result in long-term fragmentation. Draft EA, Table 16, at 53.

The Draft Biological Assessment underlying the Draft EA's conclusions states the Project is not likely to adversely affect the jaguar because (1) No individuals have been detected near the action area; the nearest known resident is in the Santa Rita Mountains, approximately 17 miles away; (2) the project will impact small, localized areas of habitat, but will not impact large tracts that would impede jaguar movement, in particular, connectivity to Mexico, and that jaguar preferred habitat of Madrean evergreen woodland with up to 50 percent cover will not be modified; and (3) any jaguar that may use the habitat will likely avoid the area during human activities, which will be short-term (two weeks at any one site, and six months for the entire project). Draft Biological Assessment at 59. All three of these statements appear specious. First, the statement that the nearest known individual resident jaguar is in the Santa Rita Mountains, approximately 17 miles away, is inconsistent with the statement in the Draft EA that the species "may occur" in the Project area and is "[k]nown to occur within 1-mile buffer of the project area." Draft EA, Table 14, at 45 (citing AZGFD 2013). Additionally, a 17 mile distance is insignificant given jaguar's large home ranges (up to 525 square miles). Second, the statement that the Project will only impact small localized areas of habitat and thus will not impact large tracks that impede jaguar movement or connectivity of habitat to Mexico misses the point.

While it is true the Project's actual "footprint" in terms of acres directly affected by mineral exploration is relatively small, focusing on this footprint is misleading. The Project consists of a series of small activities – drilling 23 geotechnical boreholes, 10 exploration boreholes, 12 hydrological boreholes/monitoring wells, excavating 15 test pits, and building 8 access roads, Draft EA at 1. These activities are spread across a 7,350 acre area and may occur in an overlapping fashion. Accordingly, jaguars, which are very sensitive to human presence and avoid such areas, 79 Fed. Reg. 12572, will very likely avoid the entire Project area during the Project, not just the actual "footprints" of Project activities. Accordingly, the entire Project area should be considered in an analysis of whether the Project will impede jaguar movement or the connectivity of its habitat. Indeed, the Draft Biological Assessment's third assertion makes this

point clear. The third statement, that any jaguar will likely avoid the area during human activities, which will be short-term (two weeks at any one site, and six months total for the entire project), actually shows how the Project will, rather than won't, adversely affect the jaguar. Being forced to avoid a local habitat area for two weeks is an adverse impact. More importantly, as discussed above, jaguars would likely avoid the entire area for the six month duration of the Project because activities may occur in an overlapping fashion and human presence will be noticeable by jaguars in the entire area. In sum, the Draft Biological Assessment's statements as to why the Project will not adversely affect the jaguar are entirely unconvincing.

The Draft Biological Assessment's conclusion that the Project will not adversely modify or destroy the jaguar's designated critical habitat in the Project area is based on two statements: (1) the project will impact small, localize areas of habitat, but will not impact large tracks that would impede jaguar movement; and (2) the Project will not negatively impact PCE's for the species. Tetra Tech 2014c at 59. Again, both statements are false. As discussed above, the Project's activities may impede jaguar movement throughout the entire Project area – a large track of jaguar habitat. Even temporary blockages of jaguar movement are adverse modifications of critical habitat – the purpose of which is too allow movement and connectivity. At a minimum those portions of critical habitat that will be turned into drill sites and excavation pits are being destroyed – and even if a small area – this destruction of designated critical habitat must be analyzed and acknowledged. As to the second statement, one of the PCE's of jaguar habitat is minimal human populations. Draft Biological Assessment at 58. During the Project, the entire Project area will have a human population as drilling may occur 24 hours a day. Thus this area of designated critical habitat will be transformed from one without a human presence to one with a continual human presence for at least six months. Again, even though temporary this is an adverse modification of one of the PCE's of designated critical habitat.

#### Lesser long-nosed bat

The Draft EA indicates the lesser long-nosed bat (*Leptonycteris yerbabuena*) is listed as endangered without designated critical habitat. Draft EA, Table 14, at 45. The Draft EA further states the species may occur in the Project area, that the Project area contains suitable foraging habitat, and that there is a significant post-maternity roost site (Bat Cave) located within five miles of the Project area. *Id.* The Draft EA further states that no individuals or populations of the species were detected in the Project area during the 2012 field surveys. *Id.* However, the Draft Biological Assessment states that “lesser long-nosed bats were detected at shaft 4 of the Hermosa Mine complex, and foraging at agaves near the complex.” Tetra Tech 2014c at 56. Presumably this detection occurred during the 2013 field surveys which are not discussed in the Draft EA and the relationship of the Hermosa Mine complex to the Project area is not discussed in the Draft Biological Assessment – but it appears the statement in the Draft EA that no Lesser long-nosed bats were detected during 2012 filed surveys is misleading and the presence of this species in the Project area should be confirmed for readers of the Draft EA.

The Draft EA concludes the Project may affect, but is not likely to adversely affect the lesser long-nosed bat because no maternity roost sites are known to occur in the area and no known roosts would be disturbed. Draft EA, Table 16, at 53. The Draft Biological Assessment supports this conclusion with three statements: (1) the proposed action will not impact any known roosts of lesser long-nosed bats; (2) bats may avoid the proposed drill sites when drilling occurs at



night, although EPMs and Design Features should reduce this impact; and (3) Agave plants that possibly could be impacted would be transplanted. Tetra Tech 2014c at 57. All three statements are specious. First, direct impacts to roost sites are only part of the story. Adverse effects to bats could also occur from impacts to its foraging habitats. Second, the statement that EPMs and Design features *should* reduce impacts on Bat foraging opportunities is not an analysis of the likely success of these mitigation measures. Third, there is no analysis of whether transplanted agave plants will survive transplantation and thus no ability to determine if this is an effective mitigation measure or not. Accordingly the Draft EA's conclusion that there are no likely adverse effects to the lesser long-nosed bat is, at base, supported by nothing but conjecture that mitigation measures will effectively reduce impacts on the bat's foraging opportunities.

### Ocelot

The Draft EA indicates that the ocelot (*Leopardus pardalis*) is listed as endangered without critical habitat, that it may occur in the Project area, and that the Project area contains suitable habitat. Draft EA, Table 14, at 45. In analyzing impacts to the ocelot the Draft EA states the Project may affect, but is not likely to adversely affect the species. Draft EA, Table 16, at 53. This conclusion is based on the fact that all recent observations of ocelots in Arizona have been in the Huachuca Mountains approximately 15 miles away and that the Project will impact small localized habitat areas, but will not impact large tracks of habitat which could impede ocelot movements. *Id.* Similar to the situation with the jaguar these conclusions are misplaced. Estimated dispersal distances for ocelots are 3 to 20 miles (Caso, 1994; Crawshaw, 1995). Accordingly, the 15 mile separation between the Project area and documented ocelot occurrences does not support a conclusion that Project will have no adverse effects on ocelots. Additionally, ocelots are very difficult to observe or document, though small spotted cats have been reported in the Project area. Additionally like the jaguar, ocelots avoid human presence and activities. Thus, the fact the Project will only directly affect a small number of acres does not translate into a supportable conclusion that the ocelot will not avoid the entire Project area during the Project due to constant human presence and activity.

### Northern Mexican gartersnake

The Northern Mexican gartersnake (*Thamnophis eques megalops*) is proposed as threatened and has proposed critical habitat. Draft EA, Table 14, at 45-6. Thus, at present, under the ESA USFS must only "confer," as opposed to "consult" with FWS concerning the Project's impacts to this species. See 16 U.S.C. § 1536(a)(4). FWS proposed to list the gartersnake as threatened on July 10, 2013, 78 Fed. Reg. 41547, and proposed critical habitat at the same time. Accordingly, pursuant to the deadlines established in Section 4 of the ESA, 16 U.S.C. § 1533, FWS must issue a final listing decision for this species by July 10, 2014, or in the case of remaining scientific uncertainty within six months thereafter. Additionally, FWS faces an obligation under the ESA to designate critical habitat for this species concurrently with its listing. Accordingly, it is likely the Northern Mexican gartersnake will be officially listed as threatened and will receive a critical habitat designation before the Project is completed. Because 50 C.F.R. § 402.16(d) requires the reinitiation of formal consultation on a Project when a new species is listed or critical habitat is designated, the USFS may be forced to consult (as opposed to confer) with FWS regarding the Project's impacts to the gartersnake at some point in the near future and would be well advised to insure the Project avoids harming the gartersnake from the outset.

The Draft EA indicates the species may occur in the Project area and that portions of the Project area contain suitable habitat. Draft EA, Table 14, at 45-6. The Draft EA also indicates the species is known to occur within the one mile buffer of the Project area, but states that no individuals or populations of these species were detected in the Project area during the 2012 field surveys. *Id.* The Draft EA concludes the Project is not likely to jeopardize the continued existence of the species because it would not affect springs, stock ponds, or perennial waters. Draft EA, Table 16, at 53. Nonetheless, because suitable habitat for this species exists in the Project area and the species is known to occur within one mile of the Project area, the possibility that undetected individual members of this species or populations exist in the Project area cannot be discounted. More importantly, the suitable habitat in the Project area could be important to the species' conservation and recovery. As discussed above for other aquatic species, because USFS lacks an adequate cumulative impacts analysis and baseline data on groundwater conditions or the relationship between groundwater and surface water in the Project area, the Draft EA's conclusion appears unsupported by any analysis in the Draft EA itself or the Draft Biological Assessment. See Draft EA, Table 16, at 53.

#### Huachuca water umbel

The Draft EA indicates the Huachuca water umbel (*Lilaeopsis schaffneriana* var. *recurva*) is listed as endangered and has designated critical habitat. Draft EA, Table 14, at 46. The Draft EA further indicates the species may occur in the Project area and that the Project area contains suitable habitat. *Id.* The Draft EA states that no individuals or populations of the species were detected during the 2012 field surveys of the Project area. *Id.* The Draft EA concludes the Project will have no effect on this species because the species was not detected during field surveys and the nearest known population is 12 miles from the action area and the Project would not affect springs, stock ponds, or perennial waters. Draft EA, Table 16, at 53. Nonetheless, because suitable habitat for this species exists in the Project area and the species is known to occur within 12 miles of the Project area, the possibility that undetected individual members of this species or populations exist in the Project area cannot be discounted. More importantly, the suitable habitat in the Project area could be important to the species' conservation and recovery. As discussed above for other aquatic species, because the USFS lacks an adequate cumulative impacts analysis and baseline data on groundwater conditions or the relationship between groundwater and surface water in the Project area, the Draft EA's conclusion appears unsupported by any analysis in the Draft EA itself or the Draft Biological Assessment. See Draft EA, Table 16, at 53.

## **X. CONCLUSION**

We appreciate the opportunity to comment on this Draft EA for the Hermosa Drilling Project. As discussed above, we believe this EA must be significantly improved in order to comply with governing law and should be re-issued for additional public comment before the Project proceeds or any final decision is reached. Also as discussed above, if a revised Draft EA is not submitted for public comment under NEPA, the agency should proceed to prepare a Draft EIS under NEPA. Please continue to include Arizona Mining Reform Coalition, the Center for Biological Diversity, Defenders of Wildlife, Earthworks, Patagonia Area Resource Alliance, and Sky Island

Alliance as interested parties and direct all future public notices and documents to us at the addresses below.

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Attachments (see list on next page)

## Attached Documents

Arizona Department of Environmental Quality: Total Maximum Daily Load For: Upper Harshaw Creek, Sonoita Creek Basin, Santa Cruz River Watershed, Coronado National Forest, near Patagonia, Santa Cruz County, Arizona. HUC: 15050301-025A. Parameters: Copper and Acidity. June 30, 2003

Coronado National Forest Schedule of Proposed Actions, March 2014

Appendix A to PARA Aug\_15\_2013 Letter - Sunnyside Project, Regal Resources – Special Status Species from AZGFD Heritage database; Court order in case CV 08-8031-PHX-MHM; Memorandum decision and court order in case CV-00341-EJL; and Van Devender, T.R., R. Spellenberg, A.D. Flesch, S. Jacobs and A.L. Reina-Guererro, 2013. Northern distributional limits of the Mexican willow oak (*Quercus viminea*) in Arizona, Sonora, and Chihuahua. Phytoneuron 2013-48:1-7.

Map: Approximate location of Mexican spotted owls on November 17, 2012.

Map: Mexican spotted owl PAC areas and drilling locations.

Emails: Mexican spotted owl sightings.

The Failure of the Rosemont Mine DEIS to Adequately Analyze the Socioeconomic Impacts of the Proposed Mine -- Comments on the Draft Environmental Impact Statement for the Rosemont Copper Project . . . Power, M.T., January 2012.

Regal Sunnyside Plan of Operations 2011.

Regal Sunnyside Scoping Letter, USDA, July 11, 2013.

Regal Sunnyside Scoping Map, 2013.

Tracing Ground Water Input to Base Flow Using Sulfate (S, O) Isotopes Gul, A., F. Gray, C.J. Eastoe, L.M. Norman, O. Duarte, and A. Long, 2008. GROUND WATER, 46(3): 502–509.

Hermosa Project Pre-feasibility Report, Issued January 17, 2014.