

**Written Statement of Sandy Bahr
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Before the U.S. Senate
Senate Energy and Natural Resources Committee
Subcommittee on Public Lands and Forests
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CONCERNING

S. 409: Southeast Arizona Land Exchange and Conservation Act of 2009

Mr. Chairman, members of the Subcommittee, thank you for the opportunity to provide information on S.409, the Southeast Arizona Land Exchange and Conservation Act of 2009. My comments will focus primarily on the problems with the exchange itself and the negative impacts of the mine the proposed exchange will facilitate. I will outline the concerns about this particular bill, why it is bad policy to avoid the National Environmental Policy Act review and analysis process, and also address some of the inherent problems with land exchanges themselves.

Loss of Oak Flat Campground

First, I would like to address the loss of the federally protected Oak Flat Picnic and Campground. S.409 will allow Resolution Copper Company (Rio Tinto—55% owner—headquartered in the United Kingdom, and Broken Hill Properties —45% owner—headquartered in Australia), which acquired the old Magma Mine near Superior, Arizona, to privatize Oak Flat Campground as part of the 2,406-acre parcel that will be conveyed should this bill be approved.

Oak Flat Campground lies within the Tonto National Forest and was recognized by President Eisenhower as an important natural resource in 1955 when he signed Public Land Order 1229 (see Exhibit A, PLO 1229), which specifically put this land off limits to future mining activity and reserved it for campgrounds, recreation, and other public purposes. Oak Flat provides many recreational opportunities for Arizonans, including for those in the local communities and for others from around the country. Recreational activities in the area include hiking, camping, rock climbing, birding, bouldering, and more (see Exhibit B, photo of Oak Flat).

Oak Flat is a key birding area. Four of the bird species that have been sighted at Oak Flat are on the National Audubon Society's watch list of declining species that are of national conservation concern, including the black-chinned sparrow, Costa's hummingbird, Lewis' woodpecker, and

gray vireo. The endangered Arizona hedgehog cactus (*Echinocereus triglochidiatus* var. *arizonicus*) also inhabits the Oak Flat area and is further threatened by this proposed mine.

Oak Flat is an important part of our history and also has significant value for native peoples, including for acorn collection and many other cultural and religious ceremonies. The tribes' written and oral testimony outlines their concerns. Because of the environmental significance of Oak Flat, its history of providing a respite for travelers and those seeking relief from the hubbub of the urban environment, the significance of the area for Native American tribes, including, but not limited to the Fort McDowell Yavapai and the San Carlos Apache, and the important recreational opportunities it offers, the Sierra Club is strongly opposed to this land swap and to this specific bill, S.409.

In addition to privatizing this important area, S.409 also rescinds P.L.O. 1229. In Section 13 of the bill, titled "MISCELLANEOUS PROVISIONS," it revokes any public land order that withdraws Federal land (see (a) REVOCATION OF ORDERS). It is disturbing to see this withdrawal of the protection for Oak Flat. Considering all the pressures on our public lands, the important services – watershed, wildlife habitat, etc. – as well as the opportunities and the critical relief from increasing urbanization they provide, it is a bad precedent and a bad message for the Congress to give up – to two foreign mining companies – an area protected by President Eisenhower more than 50 years ago.

Threats to Devil's Canyon

Devil's Canyon is located in the Tonto National Forest and on State Trust Lands near the proposed mine, just northeast of the town of Superior. It flows into Mineral Creek, which is a tributary of the Gila River. Devil's Canyon provides important and all too rare riparian habitat in a state where much of our riparian habitat has been degraded or destroyed – most estimates indicate that more than 90 percent has been lost to water diversions, groundwater pumping, and other activities.¹ Devil's Canyon is an area enjoyed by hikers and climbers and those seeking some relief from the heat. Sycamores and Arizona alders thrive on Devil's Canyon's water and also provide valuable habitat for wildlife (see exhibit C - photo of Devil's Canyon).

Considering its proximity to the proposed mine, the depth of the mine and the associated water pumping that will occur to dewater it, the risks of dewatering Devil's Canyon are significant. According to the mining company, they will pump billions of gallons of water from the shaft.² Banking Central Arizona Project water at a remote location, as the company is currently doing, will not protect this important riparian area.

According to Resolution Copper Company (RCC), this mine will need as much as 20,000 acre-feet of water per year.³ An acre-foot of water is roughly the amount of water a family of four uses in one year, so 20,000 acre-feet is enough water for 20,000 families or 80,000 people for

¹ *Biotic Communities of the Colorado Plateau*, http://cpluhna.nau.edu/Biota/riparian_communities.htm

² "Pinal farms will get reused water from mine," *East Valley Tribune*, March 14, 2009.

³ Resolution Copper website, FAQs, under "Our Approach to Water Management," <http://www.resolutioncopper.com/res/whoweare/4.html>

one year. As there is insufficient groundwater to maintain yearly mining operations over the 40 years of the mine's operation, RCC proposes obtaining and storing Central Arizona Project (CAP) water. Has RCC secured any long-term leases of this water? If not, will they? Is this feasible? What if they revert to using groundwater? What will the impact of this be? Considering how important as water is in Arizona, the continued long-term droughts we experience, and the predictions of scientists that we are going to get hotter and drier due to the impacts of climate change, it would be irresponsible to move this bill without a thorough analysis and some strong assurances that the water will be there and will not risk riparian areas or drinking water supplies.

Harm to Apache Leap

While this version of the bill keeps Apache Leap in public ownership, it does not provide adequate protection for this important geological formation. A key issue of concern is the likely subsidence and possible earth fissures that will occur as a result of mining activity in the area.

While SECTION 4 (d) (1) indicates that RCC will surrender rights to mine Apache Leap, it goes on to state in 4 (d) (2) that mining activities will be allowed. This section reads:

“Nothing in this Act prohibits Resolution Copper from using any existing mining claim held by Resolution Copper on Apache Leap, or from retaining any right held by Resolution Copper to the parcel described in subsection (c)(1)(G), to carry out any underground activities under Apache Leap in a manner that the Secretary determines will not adversely impact the surface of Apache Leap (including drilling or locating any tunnels, shafts, or other facilities relating to mining, monitoring, or collecting geological or hydrological information) that do not involve commercial mineral extraction under Apache Leap.”

SECTION 8 of S.409 is titled “APACHE LEAP PROTECTION AND MANAGEMENT.” It contains language about management of Apache Leap and about “permanent protection” of its cultural, historic, natural, and other values. This management plan for Apache Leap is not part of the overall mining plans, however, and therefore its value in protecting the land is questionable. It also can place no restrictions on mining as is indicated in subsection (c), which states:

“MINING ACTIVITIES – Nothing in this section imposes any restriction on any exploration or mining activity carried out by Resolution Copper outside of Apache Leap after the date of enactment of this Act.”

It is difficult to believe that the mining around the nearby Oak Flat parcel will not affect Apache Leap or cause subsidence in the area, especially with the quantity of ore to be removed and the method of mining – block cave – indicated by RCC. According to a 2002 report which examined several case histories of block cave mines, “No evidence was found that subsidence effects at underground hardrock mines using block caving can be managed or mitigated short of not mining.”⁴

If mining around Apache Leap cannot be affected by the so-called protections of Apache Leap outlined in the bill, then what good are these protections? If it is determined that mining

⁴ *Subsidence Impacts at the Molycorp Molybdenum Mine Questa, New Mexico* Prepared for Amigos Bravos By Steve Blodgett, M.S. Center for Science in Public Participation, February 2002.

activities are the key threats to Apache Leap and could destroy this area, how does this section help at all? How will any potential impacts be monitored?

RCC must be held accountable for any harm to Apache Leap and must pay damages if this area is significantly affected or destroyed. Provisions should be made for restoring and reclaiming the area if restoration and reclamation is even possible.

Surface disturbance of the area is supposed to be limited to fencing, monitoring wells, signs, etc. These activities have potential to disturb cultural resources. Consultation with the San Carlos Apache and Fort McDowell Yavapai tribes should occur early and consistently throughout any mining activities to properly ascertain potential impacts on cultural resources and to eliminate or at least minimize those impacts. This consultation is not provided for in this bill or in this section of the bill.

No Meaningful Environmental Analysis

S.409 allows RCC to bypass the National Environmental Policy Act (NEPA), as would be required if this land exchange was evaluated through the administrative process. An administrative exchange would require a NEPA Environmental Impact Statement on the exchange itself, including an examination of alternatives, the environmental and cultural impacts, the cumulative impacts (including past and anticipated impacts in the area), and possible mitigation of the impacts. This type of analysis helps the public better evaluate whether they are getting a fair exchange and also evaluate the true environmental impacts of such an exchange. A NEPA analysis can identify a less environmentally harmful alternative as well. It is clear that RCC will benefit enormously from this exchange. It is less clear that the public is getting a fair return on the loss of Oak Flat, the possible damage to Devil's Canyon, and the threats to Apache Leap and Pinto Creek. It should be stated that two major land exchanges involving mining in Arizona – the Ray Mine and the Safford land exchanges, both conducted Environmental Impact Statements prior to consummating the land exchanges.

Because there is no real NEPA process associated with the exchange, prior to the exchange being consummated, there is no opportunity for the public to review a Mining Plan of Operation. Instead, what we have is a shifting landscape of different answers to the same questions. We might argue with the agencies about how much information and analysis needs to be done on the exchange in an administrative process, but at least there is opportunity to make that argument.

There are key questions outstanding on this proposal, which make it impossible to say the exchange is in the larger public's interest. Where is all the mining waste going to go? What are they going to do with the tailings? Is this a sulfide ore, which is often the case for ore that is below the water table? If it is, how are they going to address the acid mine drainage from the rock dumps? How are they going to process the ore? At one point, RCC suggested using the leach pad at Pinto Valley, but if their estimates on the amount of ore are accurate, they could only process a fraction of the ore at that leach pad, and they have no agreement to process the ore there. Are they going to smelt the ore? If so, where? Clearly there are significant air quality issues associated with smelting, not to mention considerable energy use.

The bill indicates that there is to be an Environmental Impact Statement, but that is a post-exchange study. If done properly and with a solid open public process, an environmental analysis can inform the proposed action. A study after the fact does not allow that, plus there will be no opportunity to choose the no-action alternative or a less environmentally damaging alternative. A less damaging alternative might include mining of a smaller amount of ore that would not cause subsidence, dewater Devil's Canyon, or damage Apache Leap. As this bill is written, we will not know the effects of this proposed mine until after the fact. We will not know until after the deal is done if it is really necessary for the public to give up Oak Flat in the exchange or if they can mine this ore body without it. The study after the fact might make people feel better about the deal, but its value is negligible, at best, as it will not change the outcome.

If the information that RCC has provided on this proposed mine is accurate, it will be the largest mining operation in Arizona. It would be larger than the Freeport McMoran Morenci Mine and one of the largest working copper mines in the United States. To allow the company to circumvent the National Environmental Policy Act on such a large mine that has great potential to negatively affect the surrounding environs and that has so many unanswered questions associated with it would just be wrong.

Value of the Land and the Ore

This proposed legislation does not provide adequate information for the public to ascertain its impacts and its value. A critical issue not addressed by this legislation is the value of the lands that RCC will acquire. There is no real discussion of the known and anticipated mineral values on the U.S. Department of Agriculture Forest Service (public) lands. It is difficult to understand how this land exchange could move forward without solid appraisals, including on the value of the copper itself. The Mineral Report and Feasibility Study help provide the basis for the appraisal. The value of the exchange cannot possibly be properly evaluated without that.

RCC has indicated that this is a large rich ore body. According to the Rio Tinto website, the "inferred resource" of this mine is 1.34 billion tons with a concentration of copper of about 1.51 percent and 0.04 percent Molybdenum.⁵ Assuming that the ore body produces about 600,000 tons of copper per year over the 40-year life of the mine as Resolution Copper has indicated, and assuming a value of approximately three dollars per pound, the ore body RCC is seeking to mine would be worth \$144 billion. If a Net Smelter Royalty of only three percent was applied for purposes of placing a value on the minerals, RCC should be giving the public \$4.32 billion in exchange lands. What they are offering is a tiny fraction of that.

Weak Reclamation Requirements

⁵Rio Tinto website, "Resolution Copper Mining LLC reports an Inferred Resource of over 1 billion tonnes at its property in Arizona, USA," May 29, 2008, http://www.riotinto.com/media/5157_7821.asp

Another concern with the mine is its ultimate reclamation. Once the land exchange is consummated, the State of Arizona will then have oversight of any reclamation on RCC's private lands. Arizona has weak reclamation requirements and has seen the negative impacts of mining for decades. Our state contains over 100,000 abandoned mines and, while there is a fund for addressing abandoned mines, there is little money allocated to it. We have many contaminated sites that are directly attributable to mining, including the Pinal Creek site, east of this proposed mine, and the Iron King Mine, which was recently listed on the federal Superfund National Priority List.

The financial assurance mechanisms are not very strong, either, as Arizona does not require cash or bonds or paid-up insurance but instead will accept "corporate guarantees" or a company's promise to pay. If the company goes bankrupt before reclamation is complete, such as is the case with some of the ASARCO mines, then the public – the taxpayers – have to pay for any reclamation.

Inherent Problems with Land Exchanges

While land exchanges can be a tool for conservation, it is a limited tool and the pitfalls are many. It should be used very judiciously. Even with an administrative exchange that would include examination of alternatives and would look at the environmental impacts, it is difficult to determine if the public's interest is really being served. Even though the federal land management agencies are required to do thorough reviews and ensure that a trade is in the public interest, there are significant problems. The General Accounting Office (GAO) issued a report in June 2000 where it examined a total of 51 land exchanges, most of which occurred in the west⁶. The GAO auditors found that often the public lands were being undervalued while the private lands were being overvalued, resulting in significant losses to taxpayers. The agency also found that many of these exchanges had questionable public benefit.

The GAO discovered that there were some exchanges in Nevada in which the non-federal party that acquired federal land sold it the same day for amounts that were two to six times the amount that it had been valued in the exchange. While that would not necessarily be the case here, we do know that the non-federal party is likely to make billions of dollars off of this land, far short of what the public will get in return.

While the GAO was examining administrative exchanges, it noted that there are inherent problems with exchanging lands, no matter the mechanism. In particular, it noted that there are no market mechanisms to address the issues relative to value for value. The GAO indicated:

At least some of the agencies' continuing problems may reflect inherent underlying difficulties associated with exchanging land compared with the more common buying and selling of land for cash. In land exchanges, a landowner must first find another landowner who is willing to trade, who owns a desirable parcel of land that can be valued at about the same amount as his/her parcel, and who wants to acquire the parcel

⁶ BLM and the Forest Service: Land Exchanges Need to Reflect Appropriate Value and Serve the Public Interest, GAO/RCED-00-73, June 2000

being offered. More commonly, both landowners would simply sell the parcels they no longer want and use the cash to buy other parcels that they prefer. In this way, the value of both parcels is more easily established when they are sold in a competitive market, both parties have more flexibility in meeting their needs, and there is no requirement to equalize the values of the parcels. Difficulties in land exchanges are exacerbated when the properties are difficult to value—for example, because they have characteristics that make them unique or because the real-estate market is rapidly developing—as was the case in several exchanges we reviewed. Both agencies want to retain land exchanges as a means to acquire land, but in most circumstances, cash-based transactions would be simpler and less costly.

They went on to say that program improvements could not address these inherent difficulties and recommended that Congress “consider directing the agencies to discontinue their land exchange programs because of the many problems identified and their inherent difficulties.”

If land exchanges are ever suspended and these more market-oriented mechanisms used, it would be critical that the agencies focus on selling smaller parcels that are not contiguous with the larger public lands and then use the dollars to finance acquisition of inholdings and key ecological areas.

Land exchanges have been very controversial in Arizona, which may be one more reason that large corporations do not want to go through the National Environmental Policy Act process, which includes significant public involvement. Arizonans have made it clear how they feel about land exchanges by rejecting six times land exchange authority for the Arizona State Land Department.

In 2003, an independent entity, the Appraisal and Exchange Work Group, was formed to review Bureau of Land Management (BLM) land exchanges. The Work Group’s report concluded that BLM’s land appraisals were inappropriately influenced by the managers wanting to complete the deals and that these unduly influenced appraisals cost the public millions of dollars in lost value in exchanges with private entities and state governments.

One land swap resulted in an ethics violation investigation of Kathleen Clarke, the BLM Director at the time. The proposed San Rafael Swell land exchange would have cost federal taxpayers \$100 million because the BLM lands were so undervalued. The Office of Inspector General’s Report on the San Rafael Land Exchange found that several BLM employees devalued the public lands and kept information from Congress (Page 23 of Report).

Summary of Concerns about S.409

S.409 does not represent a land exchange that is in the broader public interest. A large contiguous parcel of public land – 2,406 acres – that includes Oak Flat Campground is conveyed to Resolution Copper Company. Approximately 5,566 acres is conveyed to the public, some of it in rather small parcels, but even the larger parcel by the San Pedro is significantly threatened by future nearby development.

It is pretty clear that President Eisenhower believed he had protected Oak Flat and other campgrounds when he issued the Public Land Order. If an area that has been protected from mining and other negative actions for over 50 years can be given up so cavalierly, what is next? This sets a terrible precedent. This proposed land swap should be rejected and the impacts of such a major action properly evaluated.

There is no real environmental analysis or significant public involvement process prior to the exchange. What we have instead is a mining company using its considerable wealth to garner support and curry favor with various interest groups. What will this do to Devil's Canyon? Will it destroy Apache Leap? Where will the ore be processed? What about the rock waste? How will the concerns of the native peoples be addressed? And most of all, what is the rush? Why does this proposal not include adequate time for public review, analysis, and appraisal? Even if RCC started moving forward with plans to mine today, it is unlikely they would be ready to mine this copper for several years. There is plenty of time to do a thorough analysis and look at the alternatives, the costs, the values of the lands – including environmental and cultural – and to consider the public's concerns.

For these reasons and more, we oppose S.409.

Again, thank you for the opportunity to discuss this important issue.