

Written Statement of Don Steuter
Sierra Club, Grand Canyon (Arizona) Chapter
for the
National Parks, Forests, and Public Lands Subcommittee of the House
Natural Resources Committee
Testimony on HR. 1904 “Southeast Arizona Land Exchange and
Conservation Act of 2011”
Tuesday, June 14, 2011

Mr. Chairman, members of the Subcommittee, thank you for the opportunity to provide information on HR.1904, the Southeast Arizona Land Exchange and Conservation Act of 2011. 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 will 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 area and campground. HR.1904 will allow Resolution Copper Mining (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 2422-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, 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.

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.

Recently, an endangered Sonoran ocelot (*Leopardus pardalis sonoriensis*) was killed on the road next to Oak Flat. If ocelots are making their way back to this area, culmination of this exchange and development of the mine could severely hinder that repatriation and further threaten the species' survival.

Oak Flat is an important part of our history and also has significant value for native peoples, including for many 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, HR.1904.

In addition to privatizing this important area, HR.1904 would also revoke P.L.O. 1229. In Section 10 of the bill, titled "MISCELLANEOUS PROVISIONS," it revokes any public land order that withdraws Federal land (see (a) Revocation of Orders; Withdrawal). It is disturbing to see this provision remove the protections for Oak Flat. Considering all the pressures already placed on our public lands, as well as the important services (watershed, wildlife habitat, etc.), opportunities, and critical relief from increasing urbanization they provide, it is a bad precedent and a bad message for the Congress to give up an area protected by President Eisenhower more than 55 years ago – especially to two *foreign* mining companies.

Threats to Gaan (Devil's) Canyon

Gaan 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. Gaan 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 Gaan Canyon is an area enjoyed by hikers and climbers and those seeking some relief from the heat. Sycamores and Arizona alders thrive on Gaan Canyon's water, providing valuable habitat for wildlife.

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 Gaan Canyon are significant. According to the mining company, it 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.

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.

According to Resolution Copper Mining (RCM), 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 one year. As there is insufficient groundwater to maintain yearly mining operations over the 40 years of the mine's operation, RCM has obtained and banked Central Arizona Project (CAP) water, but, with significant shortages of Colorado River likely in the near future, this water cannot be counted on long term. What if RCM reverts to using groundwater? What will the impact of this be? Considering how important 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 strong assurances that the water will remain and that mining activities 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 and other underground activity in the area.

While SECTION 5 (c) indicates that RCM will surrender rights to mine under Apache Leap, it goes on to state in 8 (a) (2) that RCM can engage in other underground activities under Apache Leap. This section reads:

The Secretary may issue to Resolution Copper special use permits allowing Resolution Copper to carry out underground activities (other than the commercial extraction of minerals) under the surface of Apache Leap that the Secretary determines would not disturb the surface of the land, subject to any terms and conditions that the Secretary may require.

This provision would allow the company access to existing tunnels and also allow it to drill additional tunnels, including for moving ore through Superior to the west. The provisions in the bill do not adequately protect Apache Leap nor prevent it from being undermined by this operation.

SECTION 8, titled "APACHE LEAP," also 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:

c) Mining Activities- The provisions of this section shall not impose additional restrictions on mining activities carried out by Resolution Copper adjacent to, or outside of, the Apache Leap area beyond those otherwise applicable to mining activities on privately owned land under Federal, State, and local laws, rules and regulations.

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

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 RCM. 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 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?

RCM 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 the 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

HR.1904 allows RCM 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, very likely, a Mining Plan of Operations (as per recent Ray Land Exchange court decision), 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 RCM 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 Gaan 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.

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.

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 operations. 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.

Key questions are 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 be transported and deposited? What is RCM 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 will RCM address the acid mine drainage from the rock dumps and its impact on water quality? How is it going to process the ore? At one point, RCM suggested using the leach pad at Pinto Valley, but if its estimates on the amount of ore are accurate, RCM could only process a fraction of the ore at that leach pad, and it has no agreement to process the ore there. It should be noted that the Pinto Valley mine operation has environmental issues of its own that need to be addressed prior to any importation of more ore and waste.

The bill indicates that there is to be an Environmental Impact Statement, but that is a post-exchange study. Likewise, no Mining Plan of Operations is available for consideration until after the fact. 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 such analysis, 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 Gaan 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 RCM 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 RCM 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 RCM 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.

RCM 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 Over the past several years, RCM has stated that it has identified an inferred resource of anywhere from 20 to 48 billion pounds of copper. At this year’s peak copper value of \$4.50/lb., RCM has an ore body worth anywhere from \$90 to \$216 billion. This does not include the value of any other minerals that might be obtained in the mining process.

An appropriate royalty on minerals for the purposes of determining equal value in this exchange might be eight percent gross smelter royalty (GSR). An eight percent GSR would value the minerals from \$7.2 billion to \$17.28 billion. Another commonly used royalty is net smelter royalty (NSR), which takes into account expenses incurred in production. This method is more difficult to verify as more accounting is involved. As an example, if 80 percent of RCM’s gross went to cover expenses, an eight percent NSR on the remaining 20 percent would value the minerals on its selected lands anywhere from \$1.44 billion to \$3.46 billion.

In addition to the mineral appraisal, the value of the surface must be taken into consideration. It could be argued that Oak Flat Campground, which will be traded away, might be appraised quite high as the Forest Service cannot find suitable land for a new campground. Oak Flat may simply be irreplaceable.

With the information we have and considering only mineral values on selected lands, RCM is offering the public perhaps \$50 million worth of land when the value of the minerals it seeks to acquire could be appraised perhaps 10 times higher or more. How can legislation still be considered when the exchange is so inequitable? The public should be receiving compensation many times over what is being proposed.

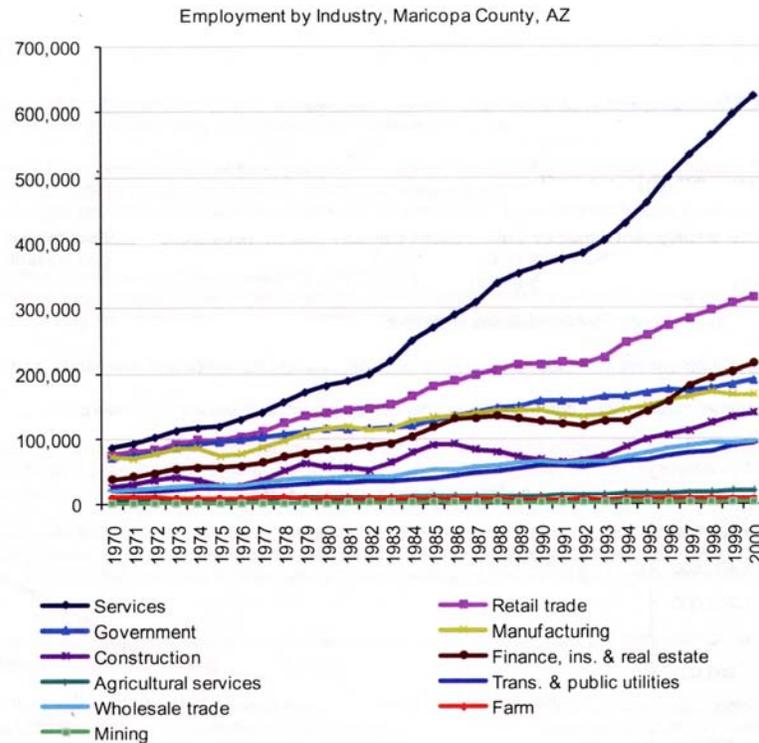
We have been asking for answers to this appraisal question for several years and have never received an adequate and informed response. We invite RCM, the Forest Service, and those promoting this land exchange legislation to explain to us how this lopsided valuation and appraisal process could possibly meet federal appraisal standards and conform to any professional appraisal practices.

Job Claims

As with many of the other claims, the job claims associated with this proposed mine and land exchange have varied quite a lot and are substantially inflated. RCM’s job number claims range from 1,200 to 6,000, which is up substantially from the 400 jobs reported in a February 14, 2006 article in the *Arizona Republic*. Without a Mining Plan of Operations, it is impossible to develop any accurate estimates or to evaluate the numbers presented by the company adequately.

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

It is clear that job trends in the mining industry are flat or downward trending, as is clear from this graph showing employment by industry in Maricopa County, Arizona.



In 2000 the three industry sectors with the largest number of jobs were services (623,864 jobs), retail trade (317,188 jobs), and finance, ins. & real estate (214,442 jobs).

From 1970 to 2000, the three industry sectors that added the most new jobs were services (536,565 new jobs), retail trade (241,262 new jobs), and finance, ins. & real estate (175,283 new jobs).

Data Sources

U.S. Department of Commerce. 2011. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Table CA25.

Modern and more mechanized mines use fewer workers, and a mine such as this is likely to rely even more on technology and mechanization. The Congress should significantly evaluate and question the job claims associated with this proposed mine.

Weak Reclamation Requirements

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 RCM'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 is now 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 was 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 analyze 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 in which it examined a total of 51 land exchanges, most of which occurred in the West.⁶ The GAO auditors found that, often, the public lands were undervalued while the private lands were 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 the following:

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 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.

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

The GAO 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 NEPA process, which includes significant public involvement. Arizonans have made it clear how they feel about land exchanges by rejecting land exchange authority for the Arizona State Land Department seven times.

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 HR.1904

HR.1904 does not represent a land exchange that is in the broader public interest and should be rejected, just as the previous nine measures were rejected. A large contiguous parcel of public land – 2,422 acres – that includes Oak Flat Campground would be conveyed to Resolution Copper Mining. Approximately 5,344 acres would be 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 would be 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 Gaan 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 RCM started moving forward with plans to mine today, it is unlikely it would be ready to mine this copper for several years. There is plenty of time to do a thorough analysis and to 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 HR.1904.

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