

## Kimberly MacMillan

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From: **Joe Dixon** <[jdixon@land.az.gov](mailto:jdixon@land.az.gov)>

Date: Wed, May 4, 2011 at 4:25 PM

Subject: Comment Letter from Arizona State Land Department

To: [NAZproposedwithdrawal@azblm.org](mailto:NAZproposedwithdrawal@azblm.org)

Cc: [kkinsall@az.gov](mailto:kkinsall@az.gov), [Theresa.Craig@azag.gov](mailto:Theresa.Craig@azag.gov), [Scott\\_Florence@blm.gov](mailto:Scott_Florence@blm.gov), Maria Baier <[mbaier@land.az.gov](mailto:mbaier@land.az.gov)>, Stephen Williams <[SWilliams@land.az.gov](mailto:SWilliams@land.az.gov)>, Vanessa Hickman <[vhickman@land.az.gov](mailto:vhickman@land.az.gov)>

Scott:

Attached is the comment letter from the Arizona State Land Department in response to the Draft Environmental Impact Statement prepared for the proposed withdrawal of approximately one million acres of federal lands in Northern Arizona from location and entry for locatable minerals, primarily uranium. The ASLD appreciates the opportunity to have served as a cooperating agency during this process and looks forward to continuing the relationship during the coming months as all of the comments are reviewed and the EIS is finalized. Please let me know if you have any questions regarding our comment letter.

Joe Dixon  
Minerals Section Manager  
Arizona State Land Department  
1616 West Adams Street  
Phoenix, AZ 85007  
602-542-2685

May 4, 2011

Mr. Scott Florence  
District Manager  
Arizona Strip District Office  
U. S. Bureau of Land Management  
345 East Riverside Drive  
St. George, Utah 84790-6714

**Re: Draft Environmental Impact Statement for the Northern Arizona Proposed  
Withdrawal of Federal Lands from Location and Entry under the 1872 Mining Law**

Dear Mr. Florence:

The Arizona State Land Department (ASLD) has reviewed the above referenced Draft Environmental Impact Statement (DEIS) for the proposed withdrawal of approximately one million acres of federal lands around the Grand Canyon from location and entry under the 1872 Mining Law. While the proposed withdrawal would apply to all locatable minerals, it is specifically designed to prevent the exploration for and the development of the significant uranium resources present on the federal lands in this area of northern Arizona. After completing its review, the ASLD is in favor of Alternative A, the "No Action" alternative. This opinion is based upon the following specific comments and concerns regarding the DEIS, its findings and matters it did not find or address.

A main concern for the ASLD is making sure the land descriptions and locations are correct. In the discussion of the Cooperating Agencies in Subsection 1.4.2, on page 1-8, the DEIS notes 57,726 acres of State Trust land are located within the proposed withdrawal area (specifically addressing Alternative B for the full withdrawal) and that an additional 4,284 acres are federal minerals with state-owned surface. According to the ASLD records for the lands within the proposed withdrawal area, there are 5,360.58 acres of split estate where the ASLD owns only the surface, 4,263.00 acres of split estate where the ASLD owns only the minerals and 52,248.37 acres where the ASLD owns both the surface and minerals. The acreage figures are summarized as follows:

|             | <u>Mineral Acres</u> | <u>Surface Acres</u> | <u>Total Acres</u> |
|-------------|----------------------|----------------------|--------------------|
| DEIS:       | 57,726               | 4,284                | 62,010             |
| ASLD:       | 56,511               | 5,361                | 61,872             |
| Difference: | 1,215                | -1,077               | 138                |

Since the total acreage is fairly close, the main discrepancy may be in the control of the minerals in some split estate sections. The ASLD does not have full knowledge of who controls the

mineral estate under the surface where the minerals have been severed (similarly, the ASLD is not always sure who owns the surface in split estate cases where the ASLD controls the minerals). It is the opinion of the ASLD that this discrepancy in acreage will have to be resolved before any withdrawal can be authorized.

In a similar vein, all of the maps in the DEIS that show land ownership within the proposed withdrawal area, Figures 1.1-1 and 2.4-1 for example, show the surface ownership rather than the mineral ownership, which is of course the issue for the DEIS. While a quick comparison of these maps shows that the surface ownership appears the same as that shown on the ASLD maps (which is understandable since they were developed in cooperation between the agencies) at least one map in the DEIS should show the mineral ownership. That would make it easier to pinpoint the sections where the discrepancies in the mineral control exist.

In accordance with the Enabling Act and the constitution of the State of Arizona, the ASLD is charged with managing and protecting the Arizona State Trust lands on behalf of fourteen beneficiaries, primarily K-12 schools and the State universities, generating income for the Trust and insuring that the income stream continues in the future. For the State Trust lands within the proposed withdrawal, 32 acres are dedicated to the Normal Schools and the other 61,840 acres are dedicated to the Common Schools, i.e. K-12 education. Closure of the federal lands as proposed in the DEIS would severely limit, if not preclude, the ASLD's ability to generate any income from the mineral resources, including uranium, present on its lands within the proposed withdrawal area. At the time the proposed withdrawal was announced in July 2009, the ASLD had 35 Exploration Permits (the State's equivalent of a federal mining claim) issued within the area proposed for the withdrawal, with another 12 pending applications. All of these Permits and applications were in the North Parcel. By the end of 2009, all of the applications had been withdrawn and all but five or six of the existing Exploration Permits had been cancelled. When contacted, all of the applicants and permittees said they had withdrawn their applications or cancelled their Permits due to the uncertainty over the proposed withdrawal of federal lands. As of this date, the ASLD is now back up to nine Exploration Permits within the proposed withdrawal area (again, all still in the North Parcel), but there continues to be concern on behalf of the permittees, and the ASLD as well, about access to these State Trust lands if the withdrawal is approved. Estimates from former uranium mining operations in the area indicate that the royalty income to the ASLD from an individual mine in a breccia pipe would be in the range of \$1.5 to \$18.5 million. Thus, the potential loss of income to the Trust and the State's school systems would be significant since the ASLD anticipates more than one mine on these State Trust lands within the proposed withdrawal boundary.

The ASLD also wants to assure that its right to access across federal lands would not be impeded by a withdrawal. The State's right to access landlocked State Trust lands for exploration projects, or for any new roads required for new mines, by crossing interspersed or adjacent federal lands may require some coordination and the issuance of some instrument regarding the route from either the Bureau of Land Management (BLM) or the U. S. Forest Service (USFS). If a withdrawal is authorized, it should be clear that access to State Trust lands would not be impeded.

The ASLD has not quantified the State Trust land acreages for Alternatives C and D considered in the DEIS. While the direct impacts on the State Trust lands and to the State Trust would be proportionately smaller, as lesser amounts of federal lands are withdrawn under these other alternatives, the general concerns of lost income and access would remain.

Other comments and items noted by the ASLD in its review of the DEIS follow.

Near the middle of page 2-3, in Section 2.2, the DEIS notes that Alternative A would rely on “the existing requirements and programs to protect the resources in the Grand Canyon watershed . . .”. So is the perceived need for the withdrawal based on an assumption that the existing regulatory framework, federal, state and local, is not working or adequate to the task? Isn’t “protecting the resources” what the existing regulations are designed for and supposed to do? And wouldn’t cumulative impacts be considered for each new uranium mine proposed on these federal lands? If there is some flaw or weakness in any of the existing regulatory framework or system, that should be, and can be, changed or fixed. This is not the same issue as a change in the General Mining Law as discussed in Subsection 2.3.5. And although the issue is addressed at the federal level in Subsection 2.3.6, the possibility of making such changes is discussed as a viable option in conjunction with any of the withdrawal alternatives, but could also be done as a separate action. If there is something that needs to be fixed or changed in the regulatory system, this would seem to be a less burdensome and costly option than a withdrawal.

Near the bottom of page 2-5, in Subsection 2.3.4, the DEIS notes that withdrawals are renewable “as long as the underlying reason for the withdrawal is still valid.” Is that renewal automatic, or would the Department of the Interior (DOI) be required to undertake another EIS analysis process at the end of the first 20 years to make sure that the original reason(s) is still valid? Even though a “Permanent Withdrawal” alternative was not considered it would be instructive to know the answer to this question since it may come up in 20 years.

At the bottom of page 2-8, in Subsection 2.4.1, the DEIS discusses previous withdrawals of federal lands in the area. These include 459 square miles for the Vermilion Cliffs and 1,638 square miles for the Grand Canyon – Parashant National Monuments. State Trust lands have also been included within and impacted by these previous withdrawals, including all or parts of 27 sections in the Vermilion Cliffs and of 51 sections in the Grand Canyon – Parashant National Monuments. All of these 78 sections of State Trust lands have been effectively closed to mineral exploration and development. While these State Trust lands are technically NOT a part of the National Monuments and are considered open by the ASLD, mineral and mining interests have told the ASLD they would not even consider trying to prospect or mine on State Trust or other open lands within the boundaries of a National Monument. This, too, suggests a loss of potential revenue for the State Trust lands and their beneficiaries.

On page 2-13 in the first paragraph of Subsection 2.4.3 on Alternative B, the DEIS states that the lands were identified by “legal description” in the *Federal Register* notice of July 21, 2009. Section 204 of the Federal Land Policy and Management Act of 1976 (FLPMA) requires: “. . . a legal description of the entire land area that falls within the exterior boundaries of the affected area . . .”. However, the notice in the *Federal Register* simply listed the townships that were

included in the proposed withdrawal, which does not constitute providing a legal description. If actual legal descriptions had been provided, the discrepancy between the federal acreage and the ASLD acreage for the State Trust lands within the proposed withdrawal area could have been narrowed down to a specific section or a few sections of land.

At the bottom of page 2-13 and continuing to the top of page 2-14, still in Subsection 2.4.3, the DEIS notes that during the preparation of a mineral examination to determine validity "sampling and testing work" and the "annual assessment work" could be performed to verify a discovery and maintain the claim. But in other sections of the DEIS, especially in the Reasonably Foreseeable Developments, Appendix B, the implication is that NO work could be done on any claims during the 2 year segregation or after the withdrawal unless validity had already been established. So, would the claimant be allowed to do additional testing and sampling, presumably drilling, any time during the withdrawal period if they wanted to prove the validity of their claim?

The ASLD also has several questions from the Reasonably Foreseeable Developments (RFD) analysis, Appendix B.

In Subsection B.1.3, Study Area, Tables B-1 and B-2 on page B-3 include seven or so uranium mines that were active, primarily during the 1980's. Were there any problems or issues with any of these mines that would justify the present level of concern necessary for the proposed withdrawal?

In Section B.4 on page B-10, the RFD notes that there are six stages in the development of a uranium mine, but there are seven bullet points listed.

In Subsection B.4.1 on page B-11, the RFD notes that the first breccia pipes were originally discovered as a result of their exposures in the walls of the canyons. However, there is no discussion anywhere within the RFD or the DEIS of how many pipes are naturally exposed within, and how much uranium is consequently being naturally eroded and released into, the Colorado River watershed. The Arizona Geological Survey (AGS) did a recent study of these naturally exposed breccia pipes, and found that the amount of uranium naturally eroding into the watershed from these exposed breccia pipes would greatly exceed any accidental release of uranium from mining activity.

The last two sentences in Subsection B.4.5 on page B-15 are either confusing or meaningless. Are levels of uranium above background unacceptable or not since they are below levels for which ADEQ requires remediation? If the levels are acceptable, what is the point of mentioning this?

In Section B.5 on page B-17, the RFD reports approximately 5,300 claims within the three withdrawal parcels. It would seem appropriate to reference here the discussion on pages B-23 and B-24 of *Known Mineralized Breccia Pipes with No Estimate of Uranium Resources* and *Known Mineralized Breccia Pipes with Undetermined Mineralization*, respectively, that a very small percentage of these claims will actually result in mines. Similar to the discussion on pages B-23 and B-24, the ASLD's experience is that only one or two in ten exploration projects

proceed to the development stage, and only one or two in ten development projects then proceed to become an actual mining operation. Thus, the number of claims is on the order of 50 to 100 times higher than the number mines that will ever be developed. This is a point which should be stressed. Many statements from some groups regarding the proposed withdrawal indicate that they assume ALL mining claims are going to result in actual mines. This is, of course, far from the reality. Also, there should be some discussion in the RFD or the DEIS about how long it would take to establish valid existing rights for all of the mining claims.

In Subsection B.7.1 on page B-18, the RFD notes that the value of other commodities or metals that could be recovered during the mining of the breccia pipes would not be sufficient to drive mine development. However, the rare earth elements were not specifically listed as one of the other metals. Several sample analyses that the ASLD has seen from some of the exploration projects in the breccia pipes on the Colorado Plateau recorded high concentrations of rare earth elements. With the current world-wide interest in and demand for the rare earth elements, the breccia pipes could represent a potentially valuable source.

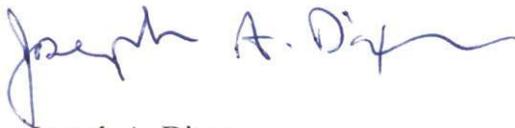
In Subsection B.7.2 on pages B-18 thru B-20, the RFD assumes that the price of uranium will remain stable at around \$40/lb. over the 20 years of the proposed withdrawal. The limited, 15-year range of price history shown on Figure B-4 might mislead anyone not familiar with mineral commodity prices in general and uranium prices in particular. If the price history were traced back to approximately the same time-frame as that used for production history shown on Figure B-3, the earlier ups and downs of the price of uranium would be seen, especially the rise in the 1970's and the dramatic fall in 1979 and 1980 after Three Mile Island. There should also be some discussion of the price of uranium being kept artificially low and stable throughout most of the 1990's to around 2005 by the reprocessing of uranium from the nuclear weapons in the arsenals of the former Soviet Union. On the futures end of uranium prices, since this section was written, probably in mid to late 2010, the price of uranium has already increased dramatically from the \$40/lb. level. The spot price for uranium hit \$72/lb. in January 2011 before falling to \$69/lb. in February 2011. And while the spot price fell even further to about \$57/lb. by the end of March following the disaster at the Fukushima plant in Japan, it has generally rebounded to trade in the mid \$50/lb. to low \$60/lb. range thru April. All of these recent prices are well above the \$40/lb. level assumed in the RFD.

Also in Section B.8.1 on page B-25, in the discussion of *Undiscovered Uranium Resources* the RFD references the Finch, et al. 1990 USGS Circular 1051 report. In the USGS Scientific Investigations Report 2010-5025, several of the figures from Finch, et al. 1990, were reproduced in Chapter A on uranium resource availability, specifically Figures 3 and 5, and it might be helpful to repeat those figures here. On page B-28, it refers to Figure B-5, but the report skips from Figure B-4 to B-6 and it is not clear if it is really Figure B-6 that is being referenced. Also on page B-28, in discussing *Uncertainty Factors* in Commodity Prices, the RFD refers to uranium prices recovering at the end of the 1990's as shown on Figure B-4; however, Figure B-4 does not start showing uranium prices until 1995 and it doesn't look like there is any real recovery in price until 2003 or 2004. This is another reason to show the earlier price fluctuations in Figure B-4, as commented on earlier.

At the end of the RFD, in Table B.1-1, with the exception of mentioning the hauling of explosives regulated by the ATF, there is no mention of hauling or transportation licenses or permits. At the Arizona Department of Environmental Quality's (ADEQ) recent public meetings and hearings for air and water quality permits for Denison's Canyon, EZ and Pinenut Mines, many of the questions and concerns raised by the attendees regarded the truck traffic and hauling. The relative disappearance of transportation as an issue for the DEIS is even more surprising since it was identified as a main issue during the public scoping process (page 2.2). The only other real mention of transportation is in Table 2.8-1, where on page 2-43 the table notes that the 22.4 miles of new roads would benefit driving for pleasure, and on page 2-45 where the table notes that the mining companies would be responsible for maintenance of unpaved public roads used for hauling. Another issue for hauling is rights-of-way across non-federal lands. For any new roads associated with new mines that would cross non-federal lands, a right-of-way agreement would be required with the land owner, either the ASLD or the private entity. In the case of a withdrawal, the converse is whether a mine operator on ASLD or private lands would be able to obtain a right-of-way across the federal lands that are now closed to location or entry.

In summary, a careful reading of the DEIS reveals nothing in the recent history of mining the breccia pipes in northern Arizona, and nothing in the Reasonably Foreseeable Developments, that would appear to justify any withdrawal. Going back to the start of the Hack Mine complex in 1981, there has been no incident or event during this 30 year period that would appear to justify the level of concern that would warrant a withdrawal. Because of this, and the potential negative impacts on the Arizona State Trust lands and their beneficiaries, the ASLD supports Alternative A, the "No Action" alternative, and does not believe a withdrawal of federal lands in Northern Arizona from location and entry under the 1872 Mining Law is justified or warranted. Thank you for your attention to our concerns.

Sincerely,

A handwritten signature in blue ink that reads "Joseph A. Dixon". The signature is fluid and cursive, with a long horizontal flourish at the end.

Joseph A. Dixon  
Minerals Section Manager

cc: Honorable Janice K. Brewer, Governor of Arizona  
Kevin Kinsall, Governor's Policy Advisor for Natural Resources  
Maria Baier, State Land Commissioner  
Vanessa Hickman, Deputy State Land Commissioner  
Stephen Williams, Director, Natural Resources Division