

Wildlife & Mining in Nevada
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“Any resource extraction by definition impacts the environment. However, it is the manner in which these activities are carried out that is crucial in minimizing adverse effects.” (Nevada Mining Assoc, 2010)

The mining industry has made great strides in reducing impacts and there is now great focus on quantification, minimization and mitigation of water, air and social impacts. However, the same is not true for impacts to wildlife. While some companies are excellent stewards, the industry as a whole mostly pays this lip service. There is also a lack of support in the regulatory process. For example, here is the relevant portion of Nevada’s Code governing “Revegetation of land” (NAC 519A.330):

1. *An operator shall:*

(a) Select and establish species of plants that will result in vegetation productivity comparable to that growing on the affected lands before commencement of the exploration project or mining operation, which is required by the manager of the land or which is consistent with the postmining use of the land.

How exactly are we supposed to return waste dump slopes, tailings ponds and open pits to “*productivity comparable to....before....mining?*” The reality is that both industry and regulators broadly ignore this requirement. Further, simple productivity, in terms of density and type of vegetation, is only one factor affecting wildlife. Far more important is the impact our facilities have to the broader habitat, including biodiversity and migration. For example, the Nevada Department of Wildlife has estimated that a recently proposed mine will cut off the migratory route for 23% of Nevada’s deer population, yet the environmental impact statement filed with the US BLM neither addresses loss of economic value nor provides any meaningful mitigations.

While the gold industry has made good progress in protecting wildlife from process ponds, but other mineral processing broadly ignores these impacts. The lithium plant near Silver Peak includes 4,000 acres of ponds. For 2012, the Dept of Wildlife estimates as many as 1,000 migratory birds have been killed, principally ducks and loons. These deaths are caused by salt crystals forming on feathers and legs, a process which happens in a matter of hours and leaves the bird to a slow drowning. There is a similar sized potash plant in New Mexico, which uses 15 hazers and 3 airboats to reduce mortality. The Silver Peak plant uses 2 hazers and no boats. Even after a \$70,000 fine by US Wildlife Services, one of the largest ever in Nevada, they have yet to make any improvement.

Exploration activities can also have large, often unrecognized impacts. In a 2011 American Bird Conservancy survey of 854 pipe claim markers, 879 dead birds were found, along with 133 reptiles and mammals. There are over one million mineral claims in Nevada. Since 1993 it has been illegal to use uncapped pipe for markers.

However, another survey found that over half of the capped pipes had their caps rendered ineffective (displaced or destroyed), despite a law that invalidates claim markers without caps.

Why should we care? There are the obvious issues of being good neighbors, good stewards, honoring the needs of our stakeholders and so forth. There's also the direct economic impact. The following is from the US Census for wildlife-related recreation in Nevada for 2011 (total contribution to the local economy):

Fishing:	\$139 million (down 40% since 2001)
Hunting:	\$204 million (down 25%)
Watching:	\$682 million (up 116%)
Total:	\$1.1 billion (up 37%)

This includes an estimated 724,000 participants, or one in four Nevadans, and totals 16% of the value of Nevada's metal mining. That is significant, yet not one of the five recently published environmental impact statements that I reviewed for this article included either an economic analysis or meaningful mitigations of the impacts to wildlife.

In 1990 the State of Nevada started the Excellence in Reclamation Award program. The "goals" for those awards do not include wildlife, habitat or anything similar. Of the 11 "selection criteria," only 1 relates directly to wildlife. Until 1999 not a single award was issued for wildlife-related activities. Since then, 11 have been issued for wildlife, out of a total of 72 awards. While that is progress, it can be viewed as both slow and late.

The Dept of Wildlife has a "Partners for Conservation & Development" program. Scores of agencies, universities, conservation and sportsmen's groups, private for-profit and non-profit organizations are active partners. The only mining-centric partner, however, is the Nevada Mining Association and only one sentence is dedicated to this partnership. Clearly there's room for improvement. According the Department's Nevada Wildlife Action Plan, "Today's open-pit mining techniques leave a much more significant footprint on the surface landscape. The habitat present before a mine pit is excavated is lost temporarily or permanently... Mining companies...even under the best of circumstances are often only able to stabilize the site in a permanently altered state. There remains considerable opportunity for collaboration...to incorporate innovative, yet realistic wildlife goals and objectives into reclamation design..."

Recognizing wildlife impacts in a meaningful way, and truly collaborating with wildlife agencies and conservation groups, are obvious steps our industry should take. What are the barriers in doing so and how do we remove them? Here are some of my thoughts:

Wildlife Commission: This board sets policies, budgets and protocols for the Department and is supposed to give both industry and the public a voice in wildlife

management. The 9-member commission includes 8 hunters and not a single wildlife management professional. Restructuring this board would allow the Dept of Wildlife to have qualified oversight. Barring that, eliminating the Commission would give the Department more latitude to deal with larger picture issues and more budget to do so.

Funding: Nevada wildlife management is funded principally by user fees (hunting, fishing, boating), and federal tax transfers (which come with significant strings attached). There is no formal funding mechanism for managing mining-related impacts. Many groups, from hunters to conservationists to animal activists, agree that this funding mechanism needs to be restructured. Sponsoring legislation to do so would be an excellent starting point.

Interagency cooperation: The key agencies for mine permitting are the Department of Environmental Protection and the US BLM. Neither of their mandates have much to do with wildlife directly, while the Dept of Wildlife is relegated to an “advise and comment” role. If wildlife is to be properly considered in the regulatory process, NDoW must have a seat at the table.

Nevada’s mine reclamation law: Closure plans are written to comply with the law, yet there is almost no wildlife-related language in the current regulations, and the revegetation language is laughable. The industry should take the lead by sponsoring the necessary legislation to update this archaic code.

Lack of collaboration: Wildlife agencies have a language and process all their own, as do miners. Simply put, the two are terrible at communicating with each other, resulting in little true dialog. Miners are viewed as heavy handed and entitled; the Department as demanding money opportunistically with neither clear legal basis nor accountability. If more mining companies became Partners, an excellent bridge-building process would begin. The Nevada Mining Association should take the lead by adopting, and motivating its members to embrace, a substantive wildlife policy covering exploration through closure.

Before any of that can happen, however, we need to recognize the many values of Nevada’s wildlife and accept that mining does impacts them, often significantly.

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