

GOLD BAR MINE PROJECT DEIS ASSESSMENT

This is an assessment of the Gold Bar Mine Project DEIS by the Nevada Sagebrush Ecosystem Program (SEP). This assessment is in response to the Nevada Sagebrush Ecosystem Council's (SEC) request at the March 3, 2017 SEC meeting for the SEP to compare the proposed mitigation in the Gold Bar Mine Project DEIS to the mitigation that would be generated by using the Nevada Conservation Credit System (Credit System) to offset the impact of the Gold Bar Mine Project.

GOLD BAR MINING PROJECT OVERVIEW & IMPACTS

The Gold Bar Mine Project is located in the southern Roberts Mountains, 30 miles northwest of Eureka and 13 miles north of US Hwy 50.

According to the Gold Bar Mine Project DEIS¹, construction and operation of the mining facilities will result in 889 acres of new direct disturbance within greater sage-grouse habitat. In addition, mining infrastructure on approximately 400 acres of existing unreclaimed disturbance from previous mining activities conducted between 1986 and 1999 will be activated. Post project, 734 acres of disturbance will be restored to pre-project condition.

Figure 1 illustrates the pre-project local-scale habitat quality within the area indirectly effected by the Gold Bar Mine Project. The total area indirectly effected by the Gold Bar Mine Project is 69,300 acres. Roughly 1/2 of the area indirectly effected by the Gold Bar Mine Project comprises relatively low quality habitat due to conifer cover and the existing disturbance (center of indirect effect area), while approximately 1/2 of the area indirectly effected by the Gold Bar Mine Project comprises relatively high quality habitat.

The Gold Bar Mine Project will generate 6,200 debits when assessed using the most recent version of the Conservation Credit System Habitat Quantification Tool (HQT), which includes the improvements approved by the SEC in January and March 2017. This debit estimate utilizes field data collected in 2016 in order to assess the site-scale habitat function.

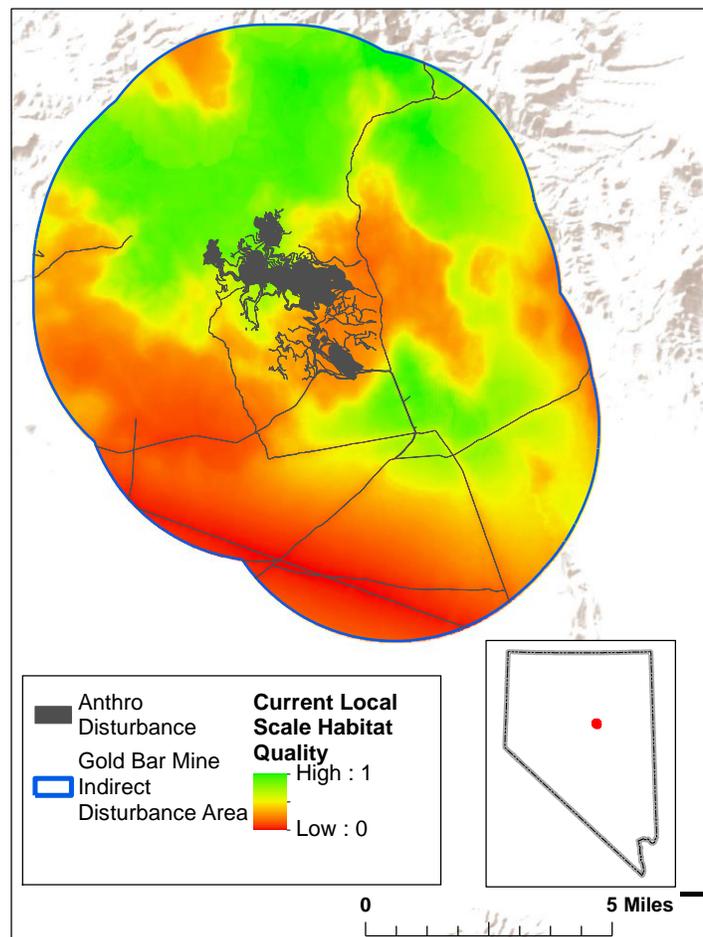


Figure 1: Gold Bar Mine Project Pre-Project Local-Scale Habitat Quality

¹ DOI-BLM-NV-B010-2015-0010-EIS. Gold Bar Mine Project DEIS: <https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=renderDefaultPlanOrProjectSite&projectId=52504>

COMPARISONS: PROPONENT DRIVEN MITIGATION PLAN AND THE CREDIT SYSTEM

The proponent driven mitigation plan proposes to conduct mitigation actions on 768 acres of PHMA and 1,626 acres GHMA within the 750,000 acre 3 Bars Ecosystem and Landscape Restoration Project area². The acres for the proposed mitigation activities are calculated using mitigation ratios of 4:1 for PHMA and 3:1 for GHMA applied to the 734 acres of new direct disturbance that will be restored. It does not appear that mitigation is proposed for the 155 acres of new disturbance that will not be restored, or any of the acres of existing disturbance containing mining infrastructure that will be activated and increase the indirect effects of the Gold Bar Mine Project.

The proponent driven mitigation plan described in Section 4.52.1 of the Gold Bar Project DEIS does not provide the information needed to estimate the credits that would be generated using the HQT, and thus determine if the Gold Bar Mine Project and proponent driven mitigation plan achieves net conservation gain.

The plan does not describe the siting of mitigation activities or delineate mitigation boundaries. The plan also lists a broad range of potential actions described in the 3 Bars Project FEIS, but does not identify specific mitigation actions that will be implemented. Mitigation actions described in the 3 Bars Project FEIS include:

- Manual and mechanical treatments to remove pinyon-juniper
- Targeted grazing
- Biological control (e.g. use of insects to reduce targeted weed population)
- Prescribed fire
- Seeding and planting
- Firewood cutting
- Streambank stabilization and channel restoration
- Activity fuels disposal

Mitigation results will vary dramatically based on the location and type of mitigation actions that are implemented. Variables such as proximity to indirect effects from the Gold Bar Mine Project, proximity to anthropogenic features, proximity to untreated pinyon juniper, existing vegetation, and the effectiveness of each mitigation activity all dynamically interact to determine mitigation results. Without data for each of these variables, it is impossible to accurately and precisely determine the credits that would be generated by the project using the HQT. In addition, the plan includes fire breaks as a potential mitigation activity,

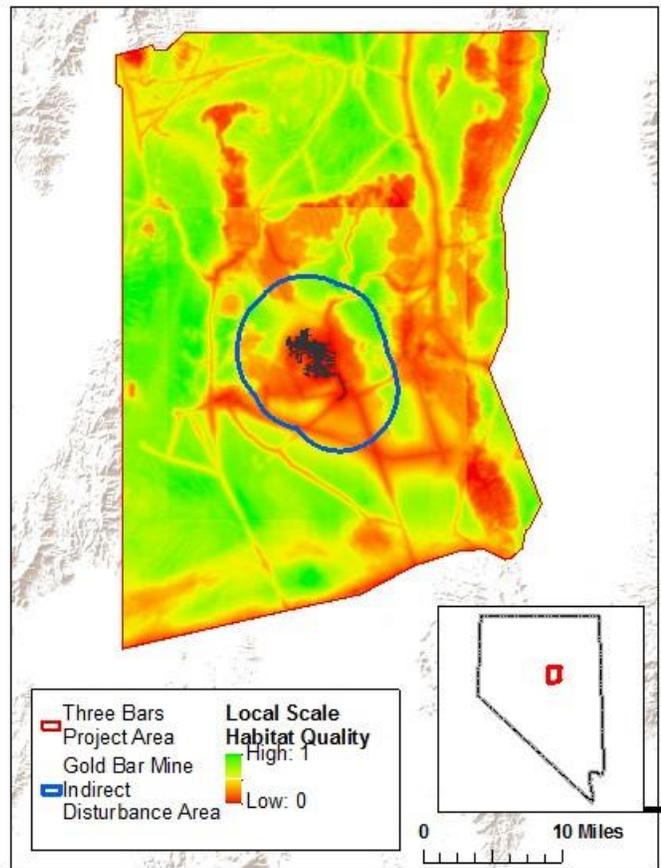


Figure 2: 3 Bar Ecosystem and Landscape Restoration Project Area Local-Scale Habitat Quality

² DOI-BLM_NV-B010-2011-0200-EIS, 3 Bars Ecosystem and Landscape Restoration Project FEIS: <https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage¤tPageId=37403>

which does not generate credits within the Credit System because of the significant uncertainty of the benefits of any particular fire break to greater sage-grouse and the significant potential for negative impacts to greater sage-grouse from introducing invasive or noxious plant species.

Figure 2 illustrates the local-scale habitat quality within the 3 Bars Project area, including the indirect effects from the proposed Gold Bar Mine Project.

There are opportunities to generate a meaningful number of credits from improving and protecting habitat within the 3 Bars Project area. However, some mitigation activities in areas with or adjacent to substantial existing pinyon juniper and anthropogenic disturbances, such as the central and east sections of the 3 Bars Project area, would potentially generate minimal credits and could potentially create a population sink due to subsidized predation, particularly as populations move between seasonal habitat types. Strategic placement of conservation activities would need to be carefully planned.

Based on the average number of credits generated per acre for the credit projects currently in the pipeline, an estimated 12,000 to 18,000 acres would need to be improved and protected to completely offset the Gold Bar Mine Project using the Credit System. Credit projects within the Credit System typically include contiguous habitat with both habitat that is improved and other habitat that is actively managed, whereas the proposed acres of mitigation in the proponent drive plan are acres of improved habitat, so it is difficult to compare the acres of credit projects to the acres proposed for mitigation in the proponent driven mitigation plan.

Durability

The proponent driven mitigation plan provides some but not a complete set of performance standards for effective mitigation. For example, the plan requires under 1% cover of pinyon juniper until reclamation is completed; however, there are no performance expectations for other potential mitigation activities such as sagebrush seeding. In addition, the plan provides some but not complete information on the timeline expected for implementing and realizing the benefits of mitigation activities, which is needed to compare the duration of mitigation benefits relative to the duration of impacts. Some mitigation activities may be implemented several years after mining operations begin, and the mitigation benefits may not materialize for several years after mitigation activities are implemented. In contrast, the Credit System requires quantifiable performance standards to be defined for all mitigation activities and for those performance standards to be achieved and verified before the mitigation can be used to offset debits. Further, each performance standard must be achieved for a contract period that ensures the mitigation benefits will persist for the entire duration of the impacts from the anthropogenic disturbance, plus 10 additional years to allow the species to begin to use the restored site of disturbance.

The proposed plan references financial assurances, but the utilization of them is not clearly defined, and it is difficult to be sure they will be used to ensure net conservation gain when performance standards are not defined. In comparison, the Credit System requires that performance standards are achieved throughout the full duration of the credit project; if they are not achieved, financial assurances will be implemented in order to ensure that credits will be replaced by credits generated elsewhere.

The proposed plan does not include any redundancy to ensure that in the event that the mitigation site is impacted by human (e.g. new mine) or natural (e.g. wildfire) disturbance, there will be no temporary or permanent net loss of habitat for greater sage-grouse associated with the project. Conversely, the Credit System requires all credit projects to contribute to the Reserve Account, which is a program-wide insurance pool of habitat credits that will be used to cover any temporary or permanent losses for an individual project impacted by human or natural disturbance.

Land Use Management & Species Status Review

The proposed plan does not include a methodology to quantify the benefits of each mitigation activity that may be implemented. In contrast, the Credit System uses a consistent metric (functional-acre) to quantify the impact of all anthropogenic disturbances and all mitigation activities. Using a consistent metric allows the Bureau of Land Management, U.S. Fish and Wildlife Service, Nevada Sagebrush Ecosystem Program, science community and other stakeholders to understand the state of habitat for greater sage-grouse across Nevada, and provide data needed for effective adaptive management of state and federal land use plans.

DEIS CONSIDERATION OF CONSERVATION CREDIT SYSTEM

The Gold Bar Project DEIS references the MOU between Nevada BLM, the SETT, and U.S. Forest Service, which requires (1) the BLM to include the SETT as a Cooperating Agency (CA) in the NEPA process and (2) include the Credit System as an alternative in the NEPA alternatives analysis process. However, the SETT was not included as a CA, and the Credit System was not included as an alternative.

The BLM determined that the Credit System was not a viable mitigation option because there are currently no credits available for purchase. It is true that verified credits are not available as of March 2017; however, credits from multiple credit projects are expected to be available for purchase within a few months. Further, credits can be generated from a new credit project in less than a year from initial project design and field data collection. Also, not using the Credit System because credits are not currently available for purchase is seemingly biased because credits are verified habitat benefits based on advanced mitigation, while the plan proposes mitigation that will not be required to be completed until 6 years after the end of active mining. As a result, the Credit System was not assessed under an equivalent standard to the proponent driven mitigation plan, and the SETT had a limited opportunity or realistic timeline to help identify solutions to the perceived challenges to using the Credit System for mitigation of the Gold Bar Mine Project.