

**U.S. Department of the Interior
Bureau of Land Management**

**Environmental Assessment
DOI-BLM-WY-R050-2016-0032-EA
Gunyan- Mike Claim Placer Plan of
Operations**

PREPARING OFFICE

U.S. Department of the Interior
Bureau of Land Management
Lander, Wyoming



Environmental Assessment

**DOI-BLM-WY-R050-2016
0032-EA**

**Gunyan- Mike Claim
Placer Plan of Operations**

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1.0 Introduction

This Environmental Assessment (EA) has been prepared to disclose and analyze the environmental consequences of the Mike Claim Placer Plan of Operations as proposed by Richard Gunyan. Richard Gunyan submitted a Plan of Operations for placer mining near Crow's Nest Gulch on the Mike #1 mining claim on May 28, 2016. The proposed operation consists of mining and processing placer gold in an area previously mined in the 1980s that has subsequently self-reclaimed and is only evidenced by shorter sage brush. Operations are planned to begin July 1, and are described in detail below in Section 2.0. Because this project is within the South Pass Area of Critical Environmental Concern (ACEC), a Plan of Operations was required per the Surface Management Regulations at 43 CFR 3809.11.

1.1. Identifying Information:

Title: Mike Claim Placer Plan of Operations

EA Number: DOI-BLM-WY-R050-2016-0032-EA

Project Type: 43 CFR 3809 Surface Management, Plan of Operations

Location: Crow's Nest Gulch off of the Hudson/Atlantic City Road at E2NWNE Sec. 15, T.29N., R.99W., 6th P.M., Fremont County, Wyoming.

Preparing Office: Lander Field Office, 1335 Main St., Lander, Wyoming 82520

Case File Number: WYW168619

Applicant name: Richard Gunyan

1.2. Purpose and Need for Action:

The need of the Proposed Action is established by BLM's responsibility under the Federal Land Policy and Management Act of 1976 (FLPMA), as promulgated through the Surface Management regulations found at Title 43 Code of Federal Regulations (CFR) Part 3809, to respond to mining operations proposed on mining claims staked under the 1872 Mining Law (as amended), the Mike Claim Placer Plan of Operations. The purpose is to ensure the activity does not cause undue or unnecessary degradation of public lands.

1.3. Decisions to be Made:

Once the submitted Plan of Operations met the standards for completeness per the 43 CFR 3809.401 content standards, BLM's decision-making is limited to:

Determining whether the Plan of Operations would or would not result in undue or unnecessary degradation of public lands as defined by the Surface Management Regulations (43 CFR 3809) using the specific performance standards described in 43 CFR 3809.420 as criteria and then either approve or request modification of the Plan of Operations until these standards are met.

1.4. Scoping and Public Involvement

Following the requirements set forth under the 43 CFR 3809.5 requirements, a Plan of Operations was submitted by the project proponent on May 19, 2016. The Plan was reviewed for completeness per the specific requirements found in 43 CFR 3809.401 and determined to be complete on May 20, 2016. Once the Plan was determined complete, a notice of availability was published in the Lander Journal on May 30, 2016 for local circulation, and notification was published on the BLM National NEPA register (ePlanning). The comment period ended June 30, 2016, and no comments were received. The project was internally scoped in the Lander Field Office (LFO) with individual meetings between BLM staff and office-wide during a meeting held May 25, 2016. Additionally, two separate trips to the site were attended by BLM personnel to evaluate site conditions and identify issues.

1.5. Identification of Issues

Table 1.1 potentially impacted resources and the potential resource issues are described below:

Resource	Resource Issue
Climate, Climate Change, and Air Quality	How will the Proposed Action and alternatives affect the air quality of the South Pass and Little Beaver Creek areas during construction and operations? Will the Proposed Action and alternatives affect local climate and will these affects influence or be influenced by climate change?
Wildlife including Big Game, Migratory Birds, Sagebrush Obligates, Riparian/Wetland Obligates	How will big game, migratory birds, sagebrush obligates, and riparian/wetland species' habitats be affected by the Proposed Action and alternatives?
Soils	How will erosion and mixing of different soil layers by the Proposed Action and alternatives affect the soil productivity and quality within the mine site?
Water	How will surface and shallow groundwater within the Crow's Nest Gulch drainage be affected by the Proposed Action and alternatives?
Vegetation Resources including Noxious/Invasive Plants	How will removal of vegetation and use of heavy equipment through the Proposed Action and alternatives affect the productivity and reclamation potential of the vegetation within the mine site? Will noxious/invasive plants be introduced and/or spread through implementation of the Proposed Action and alternatives within the mine site and travel routes to/from the mine site?
Visual Resources	How will visual resources be affected by the Proposed Action and alternatives?
Wetland/Riparian Areas	How will wetlands/riparian areas downstream of the project area be affected by the Proposed Action and alternatives through removal of water and erosion/sedimentation in the project area.

1.6. Resources Considered but Eliminated from Further Analysis

All resources that the BLM typically considers or is required to consider were identified, but many were determined to not be present or potentially affected by the Proposed Action or alternatives and, therefore, were not carried forward for further analysis. The reason for excluding these resources from analysis is as follows:

Floodplains: No floodplains exist within the project area or in close proximity to the project area that could be directly or indirectly impacted.

Prime or unique farmland: No prime or unique farmlands are identified within the entire LFO area of jurisdiction.

Wild and scenic rivers: No wild and scenic rivers included in the National Wild and Scenic River System or recommended for inclusion by the Lander Record of Decision and Approved Resource Management Plan (2014) are located within or near the project area.

Coastal zone areas: No coastal zone areas are identified in the entire LFO area of jurisdiction.

Minority and low income populations: Because the project is located in an unpopulated area and employment related to the project is limited to the mining claimant and his family, disproportionate adverse impacts to minority or low-income populations are not anticipated.

Areas of special designation: No areas relating to State, natural parks, forests, or conservations areas were identified in the project area. The project is within the South Pass Area of Critical Environmental Concern (ACEC); thus, the requirement for a Plan of Operations. Impacts related to this ACEC are addressed per the relevant and important values for which the ACEC was designated (historical properties as defined below).

Threatened and endangered species: The BLM Wildlife Biologist determined that no threatened, endangered, or listed species or habitats protected under the Endangered Species Act are present within the project area or could be impacted by the Proposed Action.

Rangeland resources: No range facilities are present within the project area, and rangeland health will not be impacted in a meaningful way (loss in Animal Unit Months) through the disturbance of one acre under the Proposed Action or alternatives.

Wild horses: There are no wild horse herd management areas (WHMAs) within or near the project area that could be affected by the Proposed Action or alternatives.

Geological resources/geological hazards: There are no anticipated geologic hazards or unique geologic resource features that could potentially be affected by the Proposed Action or alternatives.

Cultural, Historical, and Paleontological Resources: No cultural or historical resources (relevant and important values for ACEC) or issues were identified during the Class I or III investigation of the site, nor does the geology have any potential to yield fossils. However, the following standard stipulation will be applied to protect any unknown cultural and paleontological resources.

REQUIRED CULTURAL STIPULATION: The operator shall not knowingly disturb, alter, injure, or destroy any scientifically important paleontological remains or historical or archaeological site, structure, building, or object on federal lands. Operators shall immediately bring to the attention of the authorized officer any cultural and/or paleontological resources that might be altered or destroyed on federal lands by his/her operations, and shall leave such discovery intact until told to proceed by the authorized officer. The authorized officer shall evaluate the discoveries brought to his/her attention, take action to protect or remove the resource, and allow operations to proceed within 10 working days after the authorized officer is notified of such discovery. The federal government shall have the responsibility and bear the cost of investigations and salvage of cultural paleontological values discovered.

2. Proposed Action and Alternatives

The following sections describe in detail the Proposed Action and No Action Alternative and compares environmental consequences between the alternatives.

2.1. Description of the Proposed Action:

The Proposed Action consists of the Plan of Operations as submitted by the proponent, Richard Gunyan, for activities related to extraction of suspected placer gold deposits from the Mike #1 placer mining claim. The complete description of activities including detailed maps can be found in the Mike Claim Plan of Operations under case file WYW168619.

Operations would disturb approximately one acre in the upper portions of Crow's Nest Gulch, an ephemeral drainage, and would consist of the following stages: site preparation, mining/processing, and reclamation. All earthmoving would occur using a small backhoe.

Site preparation would consist of stripping up to 18 inches of topsoil from the processing area (approximately 50 by 50 feet area), settling ponds, and trench then stockpiling this material uphill on the northern side of the site. Two ponds would then be excavated at the down-gradient portion of the site each being approximately 20 feet by 20 feet by eight feet deep. The first pond would allow sediment to settle from the wash plant water which would over-flow to the second pond where the cleaner water would be pumped back to the wash plant for use in processing.

Mining and processing would occur at the concurrently; where-as, the trench would be excavated at the rate necessary to feed material into the small wash plant. The trench would be excavated to 100 feet by 40 feet by 8 feet deep. Mining would consist of stripping up to 4.5 feet of overburden to expose the pay zone which consists of a fine black sand material that overlies bedrock up to 2 feet thick. Pay zone material would be run through the small wash plant. Oversize and tailings material would be stockpiled within the processing area and placed back into the trench upon completion of mining.

Reclamation would consist of backfilling the trench and ponds with oversize material, tailings, and overburden, then re-spreading topsoil over the entire site and grading the site with the backhoe bucket and wheels. During the fall, Mr. Gunyan would come back and hand seed the site using a seed mix approved by the BLM.

Operations are expected to begin July 1, 2016 and are expected to take less than 14 days. Mr. Gunyan plans to remain on-site the entire time until operations are completed. However, if the site is left unattended for any period of time, he will construct a fence on the uphill edge of the trench or around the trench as necessary to prevent hazards.

Water for processing will be hauled from an existing water right (P35390.0D) at a small sump downstream of the project in Crow's Nest Gulch. Water will be hauled in up to three, 300 gallon plastic tanks on a flat bed trailer to the site along existing roads. The water right allows for 0.056 cubic feet per second (25.1 gallons per minute) of water to be pumped from the drainage (900 gallons would be filled in 30 minutes at this rate).

Any spills of oil or hydraulic fluid will be excavated immediately and properly disposed of, and absorbent pads will be placed under stored equipment if leaks are detected.

2.2. No Action Alternative

The No Action Alternative could be selected by the BLM, but such selection must clearly demonstrate that the proposal as designed would cause significant adverse impacts resulting in unnecessary or undue degradation of public lands or resources. It would then be incumbent upon the proponent to redesign the proposal to ensure unnecessary or undue degradation is prevented. However, because the Plan of Operations has met the completeness criteria of 43 CFR 3809.401, it would be unreasonable to speculate that the Proposed Action would be modified under this alternative. Under the No Action Alternative, Mr. Gunyan's Mike Claim Placer Plan of Operations would be denied. Therefore, the BLM would be denying the proponent's right to extract minerals on federal lands. The selection of the No Action Alternative may result in legal action by the proponent and could constitute a taking because it violates existing rights under the U.S. Mining Laws.

Under the No Action Alternative, existing land and resource use activities within the project area would continue generally as is. The operator would be limited to casual use activities which do not allow for mining, only exploration using hand tools.

2.3. Alternatives Considered but not Analyzed in Detail

Alternatives to the Proposed Action are limited to those actions that would not limit the proponent's ability to explore for valuable gold deposits on their mining claims. Therefore, the alternatives were limited to the Proposed Action and No Action Alternatives. The BLM determined that the mitigation measures described in the Plan were adequate, and BLM recommended mitigation measures are analyzed as applying to the Plan in each relevant resource section. Therefore, no "mitigated alternative" needed to be analyzed.

2.4. Conformance

The EA is in conformance with the Lander Record of Decision and Approved Resource Management Plan (RMP), June 26, 2014. Specifically, the project occurs outside of any withdrawn areas, and none of the alternatives would require an amendment to the RMP.

3.0 Affected Environment and Environmental Effects:

3.1 General Setting and Assumptions

The project area is located approximately 6 miles east of Atlantic City, Wyoming in the upper reaches of Crow's Nest Gulch (ephemeral drainage) which flows into Little Beaver Creek. This area is characterized by rolling sagebrush hills and steep drainages, and is within the South Pass ACEC. The affected environment and environmental effects sections are based on consultation with the resource specialists and their reports. In general, this section compares the current conditions taking into account past and present actions with the impacts anticipated as a result of the alternatives.

Cumulative impacts are described below for each resource. The analysis areas defined per each resource is the same area considered in cumulative impacts. In general, there are no reasonably foreseeable future projects within any of the analysis areas. The only past projects within most of the analysis areas consists of Mr. Gunyan's previous operation approximately 1/2 mile downstream on the Charmie claim. This operation was a placer mining project very similar to the proposed action that has been totally reclaimed but disturbed about 1 acre. Two other past projects within the analysis areas consist of smaller placer operations near the head of Little Beaver Creek along the Ft. Stambaugh Loop road. These projects utilized mini-excavators and dug trenches of material to be processed off-site and resulted in a total of less than 0.5 acre of disturbance and have been subsequently reclaimed. Historic mining activities also occurred within these areas, but vegetation is successfully established and these activities do not seem to contribute to past effects. If additional projects occur within the individual analysis areas per resource, the projects are described in that section.

3.2 Climate, Climate Change, and Air Quality

The analysis area for climate, climate, change, and air quality is the Little Beaver Creek drainage (approximately 30 square miles) in the South Pass area. Since air quality can follow hydrographic basins, this area is appropriate for describing the affected environment and environmental effects to these resources.

Climate, Climate Change, and Air Quality Affected Environment:

Climate: The Proposed Action would occur in a semi-arid, high mountain desert, mid-continental climate regime. The area is typically dry, windy, and has long cold winters. The nearest meteorological monitoring station (South Pass Station) is located approximately 5 miles to the northwest near Roundtop Mountain and records average annual precipitation in the area around 14 inches. Most precipitation occurs in this region in the spring and winter months. Average temperatures range between 4 degrees F and 35 degrees F in January and between 50 degrees F and 87 degrees F in July. Prevailing wind in this region is west-southwest.

Climate Change: Greenhouse gas emissions (GHGs) from fuel combustion by motor vehicles and for transportation, industrial facility operations, electricity generation, and use of commercial and residential buildings contribute to GHG emissions which influence global climate change. GHG emissions are dominated by carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). None of these GHG

emissions are monitored at the South Pass site, nor are there any identified existing sources within the assessment area that emit GHGs in a measurable quantity (or are measured for comparison).

Air Quality: Air quality in the assessment area is good (no visible haze or pollution known) . Existing background concentrations of criteria pollutants: nitrogen dioxide (N₂O), ozone (O₃), and Particulate Matter ≤2.5mm (PM_{2.5}) are monitored at the South Pass Site, but no exceedances of these standards were identified over the 2015 reporting period (WDEQ-AQD, 2015).

Climate, Climate Change, and Air Quality Environmental Effects:

Proposed Action Alternative: The Proposed Action would cause emissions of criteria air pollutants and greenhouse gases in the assessment area during construction and operations through the operation of a backhoe, pumps, and a small wash plant. However, these emissions would be localized to the project area and would not likely contribute to the current trends in climate, climate change, or air quality effects of the South Pass or Little Beaver Creek areas. Additionally, because this project will occur over 14 days this year, there are no anticipated effects to the project as a result of climate change (the project will be unaffected by the effects of climate change).

No Action Alternative: The No Action Alternative would not affect the continued good air quality trends in impacts to climate, climate change, and air quality within the analysis area since no activities would occur under this scenario.

Cumulative Effects: Because there are no meaningful differences between the alternatives in their effects to climate, climate, change or air quality, the cumulative impacts are not described in detail. Additionally, the Proposed Action would only add incrementally or very minutely to the cumulative impacts to air within the analysis area, further justifying the lack of detailed analysis.

3.3 Wildlife including Big Game, Migratory Birds, Sagebrush Obligates, Riparian/Wetland Obligates

The assessment area for big game would be the Little Beaver Creek watershed (approximately 30 square miles) because this watershed provides similar habitat and encompasses an area that big game might occupy over the operating season (summer months). The assessment area for migratory birds, sagebrush obligates, and riparian/wetland obligates would be Crow's Nest Gulch (approximately 1 square mile) because impacts to these species would be limited to the area surrounding the project with similar characteristics and where water from the project area would be contained.

Wildlife Affected Environment:

Big game animals such as antelope, deer and moose are likely to travel through or remain within the assessment area including the project area during the operating season and the rest of the year. There is no data available indicating the potential numbers of these animals within this area since the habitat of these animals can be very extensive. However, acres of disturbance within this watershed would indicate potential impacts to this watershed and the wildlife in it. No migratory birds or sagebrush obligates have been identified in the area proposed for disturbance, but these species can nest in any area with sagebrush such as the project area. Further, no riparian/wetland obligates have been identified in Crow's Nest

Gulch, but these species' can occur in any riparian/wetland area particularly where water remains year round such as the pond/spring in the lower portion of Crow's Nest Gulch.

Wildlife Environmental Effects:

Proposed Action Alternative: The Proposed Action would disturb no more than 1 acre of big game habitat through removing vegetation during site preparation. This represents less than 0.005% of the Little Beaver Creek analysis area. Similarly, migratory birds, sagebrush obligates, and riparian/wetland obligate species' habitat would be affected through surface disturbance within the Crows Nest gulch drainage, but would only represent 0.2% of the analysis area. However, these impacts would only be prevalent until reclamation was successful (between 2 and ten years including sage brush). Activities such as heavy equipment operation could disturb big game and other wildlife by creating noise and dust. These effects will only occur less than 14 days during operations. There is potential to affect migratory birds and sagebrush obligates if operations occur prior to July 15 because birds might be nesting in the area of proposed disturbance. The following measure will mitigate these impacts:

Mitigation Measure 1: The BLM would recommend but does not require that surface disturbance and/or disruptive activities that have the potential to cause destruction of nests, eggs or young of migratory birds discontinue during the period of May 1st to July 15th. However, you must conduct a survey of the proposed disturbance areas to determine the presence/absence of nesting migratory birds. Nest surveys must be conducted no more than 7 days prior to surface disturbing and/or disruptive activities. If birds or nests are identified, you will need to consult with the BLM and/or the U.S. Fish and Wildlife Service to determine appropriate mitigation measures.

Riparian/wetland obligate species might be adversely affected by removing the approximately 900 gallons of water at a rate of 0.056 cfs from Crow's Nest gulch to be used in processing; however, these impacts would be temporary because the portions of Crow's Nest Gulch that might sustain these species are maintained by springs that would replenish this area after the ~30 minutes of pumping were complete.

No Action Alternative: The No Action Alternative would not result in any changes to wildlife habitat or result in impacts to wildlife besides the continuation of the existing trends currently affecting wildlife within the analysis area that are unrelated to the Alternatives

Cumulative Impacts: Past projects within the analysis area for big game have resulted in a total maximum of 1.5 acres of disturbance which have successfully been reclaimed but may not offer big game wildlife habitat. When added to the impacts of the Proposed Action, these impacts total 2.5 acres of disturbance within the analysis area. This represents 0.01% of the analysis area. There are no anticipated cumulative impacts to migratory birds or sagebrush obligates as long as mitigation measure 1 is applied. Mr. Gunyan's past operation at the Charmie claim successfully avoided the riparian/wetland areas and disturbance has been successfully reclaimed; therefore, these operations will not contribute to cumulative impacts within the analysis area for riparian/wetland obligate species.

3.3 Soils

The analysis area for soils would consist of the Crow's Nest Gulch drainage (approximately 1 square mile) because this area encompasses the past actions and covers the extent that runoff could continue from the project.

Soils Affected Environment:

Topsoil within the analysis area varies from 0 feet deep where bedrock reaches the surface to 1.5 feet deep in drainages (such as the Proposed Action area). Topsoil is typically underlain by clay in drainages or sandy clay on slopes which often contains enough organic material to allow vegetation growth if mixed with topsoil or left exposed. However, these soils can easily erode if left exposed or un-fenced particularly if grazed by cattle or on a steep slope. Past operations within the analysis area disturbed and then successfully reclaimed 1 acre. Mining in this area also occurred historically and as recent as 1980; however, soils in the areas previously disturbed have successfully re-established vegetation and appear to be unaffected by past mining actions.

Soils Environmental Effects:

Proposed Action Alternative: Small amounts of topsoil and subsoil often become mixed in operations like these particularly because the two are indistinguishable at a common glance; however, because subsoil at this location contains organics and is composed of fine material, mixing may not inhibit plant growth substantially. These impacts will also be minimized by design features of the Proposed Action such as labeling topsoil piles, placing subsoil in areas stripped of topsoil, and placing topsoil uphill of the working area so it does not have to be re-worked. Erosion potential would increase if a large storm event occurs during operations over the 1 acre project area; however, the ponds on the downhill side of the work area will be sized to accommodate runoff from the site. After reclamation, erosion could also occur until vegetation is established but would be minimal if the site is graded appropriately back to the original contours as proposed. Total disturbance as a result of the Proposed Action represents 0.2% of the analysis area which indicates impacts will not change the soil characteristics or create large erosional issues within the analysis area.

No Action Alternative: Under the No Action Alternative, soils would remain unmixed, and erosion would not increase in potential. Therefore, soil would generally continue functioning as is.

Cumulative Effects: Total disturbance within the analysis area would total 2 acres when combining past actions to the Proposed Action (although past actions were reclaimed). This represents 0.3% of the analysis area, which will not likely contribute to changes or adverse impacts within the analysis area.

3.4 Water

The analysis area for water is the Little Beaver Creek drainage because water from the project would only make it to Little Beaver Creek in the spring or during heavy storm events when operations are not planned, so the furthest potential reach of impacts to streams would be Little Beaver, even though this is unlikely.

Water Affected Environment:

The project is in the upper-most portion of Crow's Nest Gulch which is an ephemeral drainage to Little Beaver Creek which flows continuously at a very low flow and may disappear entirely in the fall during particularly dry years in the meanders near its confluence with Beaver Creek (perennial). Crow's Nest Gulch has numerous springs throughout its length and two small reservoirs that were constructed in the 1940's during past mining operations. Flow at the bottom of Crow's Nest Gulch likely varies from 5 cubic feet per second (cfs) at the most during the spring to dry (0 cfs) in the fall with a low flow likely to occur during the operating season of around 0.5 cfs. Shallow groundwater is also connected to this surface water flow within Crow's Nest Gulch and feeds the springs throughout the drainage where clay, or some other barrier, prohibit downward flow and create a perched aquifer. This in-flow occurs at a rate approximately equal to the flow seen in the creek during low flow periods (likely 0.5 cfs during operations)

Water Environmental Effects:

Proposed Action Alternative: The Proposed Action is permitted to pull 0.056 cfs from Crow's Nest Gulch continuously; however, operations would only require 900 gallons of water that would be recycled while running the wash plant. This would result in 0.5 hour of pumping from a reservoir on Crow's Nest Gulch which would be replenished the next season at the most or within several days at the least (a low flow in this drainage would be 0.5 cfs, same as recharge rate). Shallow groundwater could be encountered during operations which would temporarily interrupt groundwater flow. This water would be pumped to the processing ponds where it would be recycled in the wash plant. Upon backfill of the site, groundwater flow characteristics would be re-established.

No Action Alternative: The No Action Alternative would result in the continued trends in groundwater flow and surface water flows and characteristics within the analysis area. The removal of water from Crow's Nest Gulch would not occur under the No Action Alternative.

Cumulative Effects: Because the reasonably foreseeable and past projects within the analysis area are reclaimed and have not shown existing impacts to water resources within the analysis area, the impacts under the Proposed Action to water would not result in cumulative impacts to Crow's Nest Gulch and Little Beaver Creek drainages.

3.5 Vegetation including Noxious/Invasive Species

The analysis area for vegetation would be the Crow's Nest Gulch drainage (1 square mile) which encompasses past actions and consists of a similar vegetation regime.

Vegetation Affected Environment:

The vegetation within the project area consists of sagebrush and grasses with some forbs. This is true throughout the analysis area, but some willows, cottonwoods and pine trees are found further down drainage. Re-vegetation of the previous mining activities completed by the proponent ½ mile down-drainage includes grass, and some young sage. Elk thistle is common in the wetter portions of the analysis area as well and has established in portions of the past reclamation. Even though the project area

was previously mined in the 1980's, the only indication would be the relatively smaller sagebrush that occupies this area. No noxious or invasive plants have been identified in the analysis area, but whitetop, Canada thistle, and cheatgrass are nearby, although not along any access routes, and have potential to move within the analysis area.

Vegetation Environmental Effects:

Proposed Action Alternative: The Proposed Action would remove 1 acre of vegetation but would be reclaimed and re-seeded at the conclusion of the season (0.1% of analysis area). Effects to vegetation would be incurred until reclamation of the site could be considered complete. The past mining activity took two years for reclamation to be considered complete. Because this site is at a higher elevation on a steeper slope with more sage-brush, reclamation may take longer than seen at the previous site (estimated three to ten years for complete success). Because there will be traffic in/out of the site and white-top, Canada thistle, and cheat grass occur nearby, although outside of the analysis area, weeds could become established. Therefore, the following mitigation measure would be required:

Mitigation Measure 2: The operator/holder will be responsible for managing all noxious and undesirable invading plant species in the reclaimed areas, including cheat grass until the vegetation activities have been determined to be successful. If noxious or invasive weeds are encountered, the BLM and/or the County Weed and Pest Department would be consulted by the operator/holder for suppression and control methods. If chemical herbicide control methods are used on public land, only BLM approved chemicals and application methods will be permitted. A Pesticide Use Proposal (PUP) and written approval from the Authorized Officer for the use of herbicides must be obtained prior to usage of herbicides.

Mobile equipment being transported from an offsite location to the BLM project area should be cleaned prior to arrival using water, steam, or air pressurized cleaning methods to remove any invasive or noxious weed seed and plant parts or materials that could contain seeds or plant parts. When appropriate, identify sites generally off public lands where equipment can be cleaned. Seeds and plant parts need to be collected and disposed of appropriately.

All mulch, seed and other vegetative reclamation materials must be certified weed free. If available all sand, gravel, and fill materials shall be certified weed free.

The weeds identified at the below website need to be controlled should they begin to grow in the project area: <http://www.wyoweed.org/weeds/state-designated-weeds>

No Action Alternative: The No Action Alternative would result in the continued trends in vegetation effects and characteristics within the analysis area. The removal of 1 acre of vegetation within the analysis area would not occur under the No Action Alternative.

Cumulative Impacts: Because there are no reasonably foreseeable projects within the analysis area and the past project has been successfully reclaimed, cumulative impacts to vegetation are not expected. Additionally, weeds introduced to the site would not cause cumulative impacts if the appropriate mitigation is upheld.

3.6 Visual Resources

The analysis area for visual resources would be the view-area of the project from the surrounding countryside. This area is very small, and consists of the upper portion of Crow's Nest Gulch because the project is tucked into a high elevation drainage that curves which very limits the opportunity for viewpoints.

Visual Resources Affected Environment:

The project is not visible from the Hudson-Atlantic City Road or any of the nearby historic trails. There are no projects or existing facilities that would disrupt or cause visual contrast within the analysis area. However, the project area is in Visual Resources Management Class II Designation (LFO RMP, 2014). This designation allows for moderate changes to the landscape that should not attract attention to the casual observer, and changes should repeat the basic visual elements.

Visual Resources Environmental Effects:

Normally, a project within VRM Class II area is not authorized unless a visual simulation and contrast rating worksheet can demonstrate that the project and associated impacts comport to the visual resource objectives of the area. However, based on the requirements of the 43 CFR 3809 regulations and the very short operating time-frame, the project would not result in undue or unnecessary degradation of visual resources, and, therefore, no additional analysis, restrictions, or mitigation measures are needed.

No Action Alternative: The No Action Alternative would not result in any changes to the landscape or alter the visual resource characteristics within the analysis area.

Cumulative Impacts: Because there are no appreciable impacts between the alternatives or reasonably foreseeable projects or past projects within the analysis area, cumulative impacts to visual resources are not expected.

3.7 Wetland/Riparian areas

The analysis area for wetlands/riparian areas would be the Crow's Nest Gulch drainage (approximately 1 square mile). This area represents the hydrologic basin within and downstream of the project area that contains any wetland/riparian areas that could potentially be impacted by the project.

Wetland/Riparian Areas Affected Environment:

Within the Crow's Nest Gulch drainage several man-made and natural barriers such as dams and willows hold water and create wetlands/riparian type habitat although none of these areas are identified riparian areas in the RMP or designated wetlands by the U.S. Army Corps of Engineers. These areas often do not hold water year-round, but can be very wet in the spring and into June. The past mining activities ½ mile downstream of the project area were completed adjacent to these wetland/riparian areas, but no affects to these areas have been identified as a result.

Wetlands/Riparian Areas Environmental Effects:

Proposed Action Alternative: Through removing water from Crow’s Nest Gulch, the Proposed Action could decrease the amount of water available in the wetland/riparian area that it is pulled from; however, as described in the water section, these impacts would be minimal because pumping would only continue for approximately 30 minutes at 0.056 cfs (900 gallons removed), and water in-flow would recover from this pumping rate within several days during low-flows likely anticipated during operations.

No Action Alternative: The No Action Alternative would not remove any water from the wetland/riparian system and would result in the continuation of current trends of wetland/riparian resources and characteristics within the analysis area.

Cumulative Impacts: Because there are no reasonably foreseeable projects within the analysis area and the past actions have been reclaimed, cumulative impacts to wetlands/riparian areas are not expected.

5.0 Tribes, Individuals, Organizations, or Agencies Consulted:

Notification of the project was made on the BLM NEPA register (ePlanning) webpage when the project was submitted. Additionally, the public was notified of the availability of the Plan of Operations for review for 30 days. No public comments were received. This EA will also be made available to the public via the BLM NEPA register upon its completion. The Wyoming Department of Environmental quality, Land Quality Division was consulted on the Plan of Operations and reclamation cost estimate.

6.0 List of Preparers

List of Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Tom Sunderland	Geologist	Author
Tim Vosburgh	Wildlife Biologist	Consultation on wildlife
Craig Bromley	Archaeologist	Consultation on Archaeology
Jeremie Artery	Weed Management Specialist	Consultation on vegetation and weeds
Kristin Yannone	Planner	Reviewer, general consultation
Ben Kniola	Assistant Field Manager, Minerals and Lands	Reviewer