

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ARIZONA
TUCSON FIELD OFFICE**

EA #: AZ-420-2005-020

Project Name: Saginaw Hill Mine Shaft Closure

BLM Contact Person: Bill Auby

Legal Description and Map Name: Public land administered by the BLM in southwest Tucson, in the vicinity of Valencia Avenue and Mark Road, Pima County, Arizona. The general location is T. 15 S., R. 12 E., Sections 11 and 12 of the Gila and Salt River Principal Meridian. The area is covered by the Cat Mountain 7.5' USGS quadrangle, and shown on Map 1.

I. INTRODUCTION

Background:

Saginaw Hill is part of the Amole Mining District where gold, silver, and base metals were mined in the early 20th Century. The legacy of this mining is a landscape with many abandoned mine features such as mine shafts and mining wastes. BLM is engaged in a CERCLA cleanup action that is addressing the waste dumps, slag, and tailings.

The Need for the Proposal:

During the course of BLM's investigation of the abandoned mines, BLM discovered 29 open mine shafts that pose a safety risk to users of the public lands. The BLM parcel on which these shafts occur is surrounded by residential development, a public elementary school, and a casino. Saginaw Hill is criss-crossed by myriad roads that are heavily used by OHV recreationists, hikers, and such. Under the authority of the Federal Land Policy and Management Act, BLM is compelled to take any reasonable and prudent action to alleviate a threat to the public.

Conformance with Land Use Plan:

The proposed action is subject to the *Phoenix Resource Management Plan (RMP)*, approved September 1989. This proposed action has been reviewed to determine if it conforms with the land use plan terms and conditions as required by 43 CFR 1610.5, BLM MS 1617.3.

Relationship to Statutes, Regulations or Other Plans or Policies:

(State law, county, non-BLM)

The BLM decision only authorizes action on BLM land. Actions on non-BLM land (National Forest, State Trust land, private land) is subject to the agency or private landowners' permission.

(USFWS Section 7) Public lands in the area are subject to the current Lesser long-nosed bat and Cactus ferruginous pygmy owl protocol.

II. THE PROPOSED ACTION AND ALTERNATIVES

Description of the Proposed Action:

The proposed action is to backfill the hazardous mine shafts with rock material that was removed from the shafts during mining. A backhoe and dozer will be used to move material from waste rock piles adjacent to the shafts and place the rock into the shafts. This work is expected to be completed over a five day period. Vehicle access to the shafts will be via existing roads to the extent possible. Some off road movement of equipment will be required to reach some shafts.

Operators will avoid saguaro cactus. If necessary, cactus will be transplanted by the equipment used to backfill the shafts. Equipment will be washed prior to transport to project area to prevent the spread of noxious weeds.

A survey for Lesser long-nosed bats and bat habitat has been completed. This survey found that the mine shafts to be filled were not suitable habitat.

No Action Alternative:

The shafts would remain in their current state. The emergency closure of the area to public access would remain in place.

III. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES:

Critical Elements: The following critical elements are not affected by the proposed action or alternatives because they do not occur in the proposed use area, or because of the nature of the proposed action: ACECs, Air Quality, Floodplain, Wetlands/Riparian Zones, Wild and Scenic Rivers, Prime Farm Lands, Wilderness, National Energy Policy

Threatened and Endangered Species: The area is habitat for the Lesser long-nosed bat and the Cactus ferruginous pygmy owl.

Impacts of the Proposed Action: A survey found no Lesser long-nosed bats occupying the mine shafts and that the shafts are not suitable habitat for bats therefore no impacts to the Lesser long-nosed bat are expected.

Saginaw hill is not critical habitat nor is it suitable habitat for Cactus ferruginous pygmy owl.

There are no Pima pineapple cactus near the shafts.

The area of the shafts is Category 3 Desert Tortoise habitat. The mine dumps are not suitable habitat for Desert tortoise. Each area of backfill will be carefully inspected for tortoise immediately prior to backfilling operations. If a tortoise is encountered it will be carefully relocated to a safe spot using BLM tortoise handling protocols.

Impacts of the No Action Alternative: The no action alternative would have no impact on the Lesser long-nosed bat, Pima pineapple cactus, Cactus ferruginous pygmy owl, or Desert tortoise.

Cultural Resources: Saginaw Hill is an old mining area that was active from 1895 to the 1950's. There are historic retaining walls and footings and waste piles from this period.

Impacts of the Proposed Action: Backfilling the shafts will not impact the historic structures. No sites are known to exist in the area of the shafts. An archaeologist will be on hand to survey each site immediately before it is backfilled.

Impacts of the No Action Alternative: None.

Native American Religious Concerns: Saginaw Hill has no Native American religious significance.

Impacts of the Proposed Action: None.

Impacts of the No Action Alternative: None.

Wastes, Hazardous or Solid: Saginaw Hill is heavily impacted by illegal solid waste dumping.

Impacts of the Proposed Action: No wastes will be generated from this action.

Impacts of the No Action Alternative: None.

Water Quality, Drinking or Ground: Ground water occurs between 100 and 200 ft below the surface.

Impacts of the Proposed Action: Filling the mine shafts will prevent the direct dumping of wastes into the subsurface, reducing the threat of groundwater contamination due to illegal dumping.

Impacts of the No Action Alternative: The mine shafts would remain open, creating an attractive nuisance allowing any contaminants dumped on the surface to more readily reach groundwater.

Soils: Soils are very thin and coarse and are composed chiefly of weathered bedrock.

Impacts of the Proposed Action: Filling the mine shafts and removing waste rock piles will return the land to more natural contours, slowing soil erosion. Temporary disturbance of soils will result from the action.

Impacts of the No Action Alternative: No impacts to soils.

Vegetation: The plant community in the project area is Sonoran scrub with palo verde, creosote, brittle bush, and saguaro.

Impacts of the Proposed Action: Vegetation including palo verde, cholla, brittle bush, prickly pear cactus, and creosote may be damaged or destroyed as a result of the action.

Impacts of the No Action Alternative: No impacts to vegetation.

Noxious Weeds: Saginaw hill is relatively weed-free.

Impacts of the Proposed Action: Equipment will be washed prior to transport to project area to prevent spread of noxious weeds.

Impacts of the No Action Alternative: No impacts to noxious weed control.

Environmental Justice: The project area is adjacent to a lower income, minority neighborhood.

Impacts of the Proposed Action: The project will remove a public safety hazard. Pima County planners have indicated a desire to see this land used as a public park in the future. This project will remove one impediment to achieving that use.

Impacts of the No Action Alternative: A hazard to public safety would remain adjacent to a lower income, minority neighborhood.

Cumulative Impacts:

Cumulative Impacts of the Proposed Action: Filling abandoned mine shafts in an ongoing activity throughout the region, particularly in urban areas where public safety is a greater concern. Removing these hazards provides greater opportunities for safe recreation on the public lands.

Cumulative Impacts of the No Action Alternative: These mine shafts would remain a part of the backlog of mine reclamation activities and remain a threat to public safety.

Description of Mitigation Measures: *(repeated from proposed action)*

Proposed Action:

1. Each area of backfill will be carefully inspected for tortoise immediately prior to backfilling operations. If a tortoise is encountered it will be carefully relocated to a safe spot using tortoise handling protocols.
2. If cactus are encountered growing on the shaft dump material, they will be carefully moved with heavy equipment and transplanted.
3. The area around each shaft will be surveyed by an archaeologist before backfilling. If any artifacts are discovered, operations will cease at that feature until clearance is received.

No Action: None.

Compliance and Area Monitoring: No compliance or monitoring is anticipated after this action is completed.

PREPARERS

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Persons and Agencies Consulted:

TFO BLM NEPA Team