

ENVIRONMENTAL ASSESSMENT
No. DOI-BLM-CO10-2012-0007

LIMESTONE POINT FLAGSTONE
QUARRY

United States Department of the Interior
Bureau of Land Management
2755 Mission Boulevard
Kingman, Arizona 86401

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1.0 INTRODUCTION

1.1 PURPOSE AND NEED FOR PROPOSED ACTION

This proposal will allow the public to exploit flagstone from public land near the village of Truxton, Mohave County, Arizona . The need for this quarry is demonstrated by public inquiries for and interest in flagstone located on public land. This particular variety of flagstone is only found in northeastern Mohave County.

1.2 CONFORMANCE WITH LAND USE PLANS

The proposed action is in conformance with the Kingman Resource Area Resource Management Plan approved March 7, 1995. The area is open to mineral material sales. The area is classified as VRM Class IV.

1.3 RELATIONSHIP TO STATUTES, REGULATIONS, OR OTHER PLANS

The proposed action is currently or will be in conformance with all applicable statutes and regulations prior to construction. The laws, regulations, guidelines, and ordinances that apply to the proposed action include, but are not limited to, the following:

- National Environmental Policy Act of 1969, as amended
- Endangered Species Act of 1973, as amended
- Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977
- Safe Drinking Water Act, as amended
- National Historic Preservation Act of 1966, as amended
- Clean Air Act, as amended
- Resource Conservation and Recovery Act of 1986
- Native American Graves Protection and Repatriation Act of 1990
- American Indian Religious Freedom Act of 1978
- Archaeological Resources Protection Act of 1979
- BLM Environmental Handbook (H- 1790-1)
- Arizona Native Plant Law

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

This proposal is to allow exploitation of flagstone from Section 30, Township 23 North, Range 11 West, Gila and Salt River Meridian (Latitude 35° 21' 12" N, Longitude 113° 29' 16" West); located on public lands approximately ten miles southeast of the town of Truxton, northeast Mohave County, Arizona. An existing access road leads from U.S. Route 66 at milepost 91 about seventeen miles to the quarry site. A one acre storage yard, located adjacent to the access road at its intersection with U.S. Route 66, will be used to store palletized flagstone, which will be loaded onto semi-trucks for transport to market. See attached mining plan for details.

2.2 NO-ACTION ALTERNATIVE

The no-action alternative consists of not approving the flagstone quarrying operation.

3.0 AFFECTED ENVIRONMENT

3.1 MINERAL RESOURCES

The Limestone Point Flagstone Quarry will be developed in the lower Paleozoic strata which define the Grand Canyon's lithology. The flagstone is a quartzite member of the Bright Angel Shale formation, Tonto Group of strata.

Slopes range from six to twenty-five percent. The overlying soil resources are shallow in depth, with an extremely cobbly-clayey loam surface. The subsurface is a very cobbly, clayey loam to clay. Quartzite is found in outcrop and at depths of no more than eighteen inches. This soil is a shallow, well-drained soil with a low available water-holding capacity. Hazard of erosion by wind and by water are both slight.

3.2 BIOLOGICAL RESOURCES

Vegetation – The dominant vegetation at the quarry consists of single-leaf Pinon Pine (*Pimo*), Utah juniper (*Juos*), and turbinella Oak (*Qutu*). There are also various other chaparral shrub species such as *Ceanothus* (*Cegr*) and manzanita (*Arpu*). There is a very sparse understory consisting of widely scattered broom snakeweed (*Gusa*), a few perennial grasses such as squirreltail (*SiHy*) and blue grama (*Bogr*), and miscellaneous forbs such as Palmer penstemon (*Pepa*).

Wildlife typically found in this area include desert mule deer, pronghorn, elk, and non-game migratory birds.

Threatened and Endangered Species – There are no known threatened or endangered plants or animals that occur in the project area.

California condor – The project area is within the experimental nonessential range of the California condor. This status applies to condors only when they are within the experimental population area. Outside of this area, condors are considered endangered.

Condors could potentially occur in the project area while foraging, however they have not been documented in this area. There are no historical or known nests or roost sites within the project area. The current known locations and concentrations of condors are not within the Kingman Field Office boundaries (pers. comm. Chris Parish, Peregrine Fund, August. 2011).

There are no other federally threatened, endangered, or candidate species found within the allotment.

3.3 AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)

The flagstone quarry is located in the extreme southeast corner of the Wright and Cottonwood Creeks Riparian and Cultural Area of Critical Environmental Concern. This ACEC was created to improve and maintain aquatic and riparian habitat conditions and to protect and enhance cultural resources. Wright and Cottonwood Creeks are completely isolated from all other drainages which support fish populations in the Kingman Field Office's area of administration. Wright Creek is a perennial stream with exceptional scenic qualities providing habitat for an atypical strain of the native *Agosia chrysogaster*, the longfin dace.

The Beale/Mohave Road, along the northern boundary of the ACEC, is a 1,000 year-old Indian trail which later became the first pioneer wagon trail. Later, the Atlantic and Pacific Railway transcontinental trains and motorists on U.S. Route 66 traversed this area. There are numerous sites from the Cohonina and Prescott prehistoric cultures here. Also, there is evidence of historic dryland agriculture, a very rare occurrence away from the main rivers of northwestern Arizona.

3.4 AIR QUALITY

Air quality is affected by climatic conditions which are characterized by hot, windy summers and moderate, moist winters. Precipitation occurs as high-intensity thunderstorms during the summer "monsoon" season (July/August) and by periods of light rain during the later winter months (January/February/March). Snowfall is light to moderate. Average annual precipitation is eleven and one-half inches. Under the National Ambient Air Quality Standards, most Kingman Field Office administered lands are rated Class II.

Air emissions at the site will include fugitive particulate emissions from excavation and truck traffic activities and tailpipe emissions (oxides of nitrogen, carbon monoxide, sulfur dioxide, and PM10). These emissions will be authorized under the air quality control general permit issued by the Arizona Department of Environmental Quality for flagstone quarry operations within Arizona.

3.5 RANGE MANAGEMENT

The quarry is located within the boundaries of the Crozier Canyon grazing allotment (GR00026). The allotment contains about 106,175 acres of public land and consists primarily of pinyon-juniper type vegetation. The permittees, Gary and Linda Overson, are authorized 979 cows and 12 horses on this grazing allotment at the present time.

3.6 VISUAL RESOURCES

The proposed project site lies within Visual Resource Management Class IV. This classification allows management activities which require major modification of existing landscape character. The level of change to landscape character may be high, and management activities may dominate the view. The existing landscape is composed of relatively flat terrain with an overstory of pinyon pine trees. Existing disturbances to the landscape include several jeep roads, some firewood harvesting area and existing stone quarries. Typical viewers would be those few public land users engaged in hunting or other recreational activities

3.7 CULTURAL RESOURCES

The proposed project lies in close proximity to numerous archaeological sites. The sites are consistent with others in the region and include lithic scatters, food processing areas and roasting features. These sites likely represent seasonal camps utilized by both prehistoric hunter-gatherer populations and historic Hualapai. Hualapai consider sites of their ancestors to be traditional cultural properties (TCP's).

4.0 ENVIRONMENTAL IMPACTS

The following critical elements have been analyzed and would not be affected:

- Areas of Critical Environmental Concern (See analysis below.)
- Prime or unique farmlands
- Floodplains

- Threatened and Endangered Species
- Water Resources
- Wetlands/Riparian zones
- Wilderness
- Invasive Weeds
- Areas of Critical Environmental Concern
- Wild and Scenic Rivers
- Environmental Justice
- Cultural Resources

The Wright and Cottonwood Creeks Riparian and Cultural Area of Critical Environmental Concern would not be affected. See Cultural and Biological Resources below for analysis of impacts to the ACEC.

4.1 MINERAL RESOURCES

Adverse impacts to mineral resources include the excavation of flagstone from fifty acres. Final pit floor elevation will reach a depth of no more than twenty feet below surrounding undisturbed terrain. This amount of exploitation of flagstone is insignificant when compared to the vast potential reserves of flagstone in the area.

4.2 BIOLOGICAL RESOURCES

Fifty acres of vegetation and wildlife would be removed as a result of the proposed action. These fifty acres would become unsuitable for use by wildlife because of the mining activity and the removal of habitat. In the long term, final reclamation would result in the return of this land to useful wildlife habitat. The presence of a night watchman and the potential for watch dogs would disturb wildlife that may use the habitat adjacent to the quarry. Wildlife may be harassed by dogs and inhibited from using the surrounding habitat because of the presence of humans and a dog(s). The quarry would not affect the riparian areas because it will not be in a riparian area, but instead on a hilltop.

4.3 AIR QUALITY

The proposed project would result in a small increase in short-term air emissions including fugitive particulate emissions from excavation and truck traffic and tailpipe emissions (oxides of nitrogen, carbon monoxide, sulfur dioxide, and PM10).

4.4 RANGE MANAGEMENT

The quarry will have no significant adverse impact to livestock management or grazing administration. To the contrary, the quarry operator has agreed to maintain and upgrade fence gates and cattle guards for the grazing allotment holder, Gary Overson.

4.5 VISUAL RESOURCES

The proposed action will be consistent with VRM Class IV objectives. Until reclamation is successfully completed, there will be a landscape scar created at the quarry site. This disturbance is screened by the heavy pinyon pine cover and is not visible until a person is directly on top of the site. Lighting of the quarry at night would create a visual obstruction as there currently are no permanent lights for many square miles surrounding the quarry site.

4.6 CULTURAL RESOURCES

The cultural resources located in the two proposed parcels make up a significant percentage of the entire acreage. Steps need to be taken by the proponent to ensure that all cultural resources are avoided by the proposed action. This will include fencing off the boundaries (with a buffer zone) of the sites and limiting excessive foot traffic through the site areas. In addition, the nearly reclaimed road south of the cargo container and camp trailer needs to be fenced off to vehicular traffic in order to avoid causing damage to one of the sites. If the proponent follows these steps, then a determination of No Adverse Effect can be made. No cultural resources will be affected because the cultural sites have been identified and will not be disturbed.

4.7 CUMULATIVE IMPACTS

The scope of the project may eventually include up to about fifty acres, based on local outcrops of this flagstone. At present, disturbance caused by historic quarrying measures no more than five acres. Over the life of the mine at this location, the type of impacts would remain the same, but the increasing area of disturbance would result in the potential increase in the magnitude of adverse impacts. For example: As the affected area increases, more plant and wildlife habitat would be destroyed, more fugitive dust could be generated, more grazing land would be unusable, the disturbance would be visible for a longer distance, and so forth. Cumulative impacts will be reduced by requiring reclamation of depleted areas of the pit area to be reclaimed concurrently with on-going excavation, through re-contouring and seeding with desirable plant species to restore the area, eliminate erosion and minimize visual scars.

4.8 RESIDUAL IMPACTS

Residual impacts will be the loss of mineral material from this site, the long term alteration of up to fifty acres of plant and animal habitat, and the permanent alteration of the landscape which will remain after the operation is complete and reclaimed.

5.0 MITIGATION

5.1 MINERAL RESOURCES

Where adequate thickness of growth media (topsoil) exists, i.e. more than six inches thickness, the operator will scrape this layer of soil from the area to be affected over the next year of the contract. This material will be stored in neat, continuous berms on the nearest final limits of mining, in order that it will not be disturbed until such time that reclamation of this affected area commences. In order to keep the microbiotic organisms alive in the top soil the berms will be no more than four feet tall. Reclamation of the affected areas will commence after mining of the first 2 ½ acres has been depleted of mineral and a new area of mining has been begun.

Prior to disturbance of each 2 ½ acre parcel, all cacti and agave will be transplanted immediately, by hand, adjacent (within 20 feet) to the proposed project area.

Reclamation will be sequential and occur after each 2 ½ acre area of disturbance is completely depleted of mineral. Final reclamation will commence within thirty days of the permanent end of mining. All faces and slopes within the affected area will be graded to a slope no steeper than one vertical on three horizontal. After final contours, which will blend with surrounding undisturbed topography, are achieved, they will be scarified in preparation for seeding and planting of pinyon trees. Small pinyon tree seedlings and native seeds will be planted on the mined areas. The pallet

storage yard near Route 66 will also be reclaimed. The area will be ripped to a depth of no less than 12 inches and recontoured, and reseeded with native seeds. In order that BLM may determine the optimal time for the proponent to plant the seed, the operator will notify BLM when re-contouring has been completed.

5.2 BIOLOGICAL RESOURCES

The long term alteration of plant and animal habitat is expected but unavoidable. The procedures proposed in reclamation provide an environment to accelerate the succession back to the habitat that exists at present. After final contours, which will blend with surrounding undisturbed topography, are achieved, they will be scarified in preparation for seeding and planting. BLM will determine the optimal time for the seed to be planted and provide a seed list and amount of seed to plant. Small seedling pinyon trees would be planted and watered weekly for the first year following planting. A small plastic mesh barrier would be put around the trees to prevent herbivory by rabbits, big game, and livestock. At BLM's discretion, the operators or BLM will perform final reclamation and seeding.

All dogs will be kept contained in a fenced yard and not allowed to roam the quarry site or surrounding lands at any time.

5.3 AIR QUALITY

The increase in tailpipe emissions caused by the loader and haul trucks cannot be mitigated. Fugitive dust will be suppressed as required by Arizona Department of Environmental Quality regulations by frequent application of water to haul roads.

5.4 RANGE MANAGEMENT

The long term removal of up to fifty acres from available grazing land is inevitable and would be mitigated by reclamation and a long, slow re-vegetation of the affected area. Alternative grazing areas with similar, low utility are in abundance in the immediate vicinity, however.

5.5 VISUAL RESOURCES

Visual resource mitigation would include keeping stockpiles and any structures at minimum height. No permanent infrastructure will be visible from outside the immediate area of disturbance, except from nearby hilltops. To prevent light pollution there will be no all-night lighting present at the quarry. All lights e.g. those on the watchman's residence etc. will be hooded and pointed downward and not left on at night.

5.6 CULTURAL RESOURCES

Mitigation for cultural resources would only be necessary if the proposed action were going to adversely affect the resource(s). In order to avoid adverse effects, the project proponents will fence off the site boundaries with a 20 foot buffer zone. In addition, the reclaimed road south of the cargo container and camp trailer will need to be closed to access related to the proposed activity in order to avoid adversely affecting one of the sites. The fence will consist of t posts with a single strand of smooth wire approximately 2 to 3 feet above the ground to deter vehicular and foot traffic in the site areas.

6.0 CONSULTATION AND COORDINATION

This project was reviewed under the National Environmental Policy Act by Kingman Field Office staff in November, 2011. Those contributing to the environmental review process include:

Arizona Game & Fish Department
Pete Bungart, Hualapai Department of Cultural Resources Archaeologist
Abe Clark, BLM Range Management Specialist
Hualapai Tribe
Don McClure, BLM Asst. Field Manager
Paul Misiaszek, BLM Geologist
Rebecca Peck, BLM Wildlife Biologist
Ruben Sanchez, BLM Field Manager
Tim Watkins, BLM Archaeologist
Andy Whitefield, BLM Land Law Examiner

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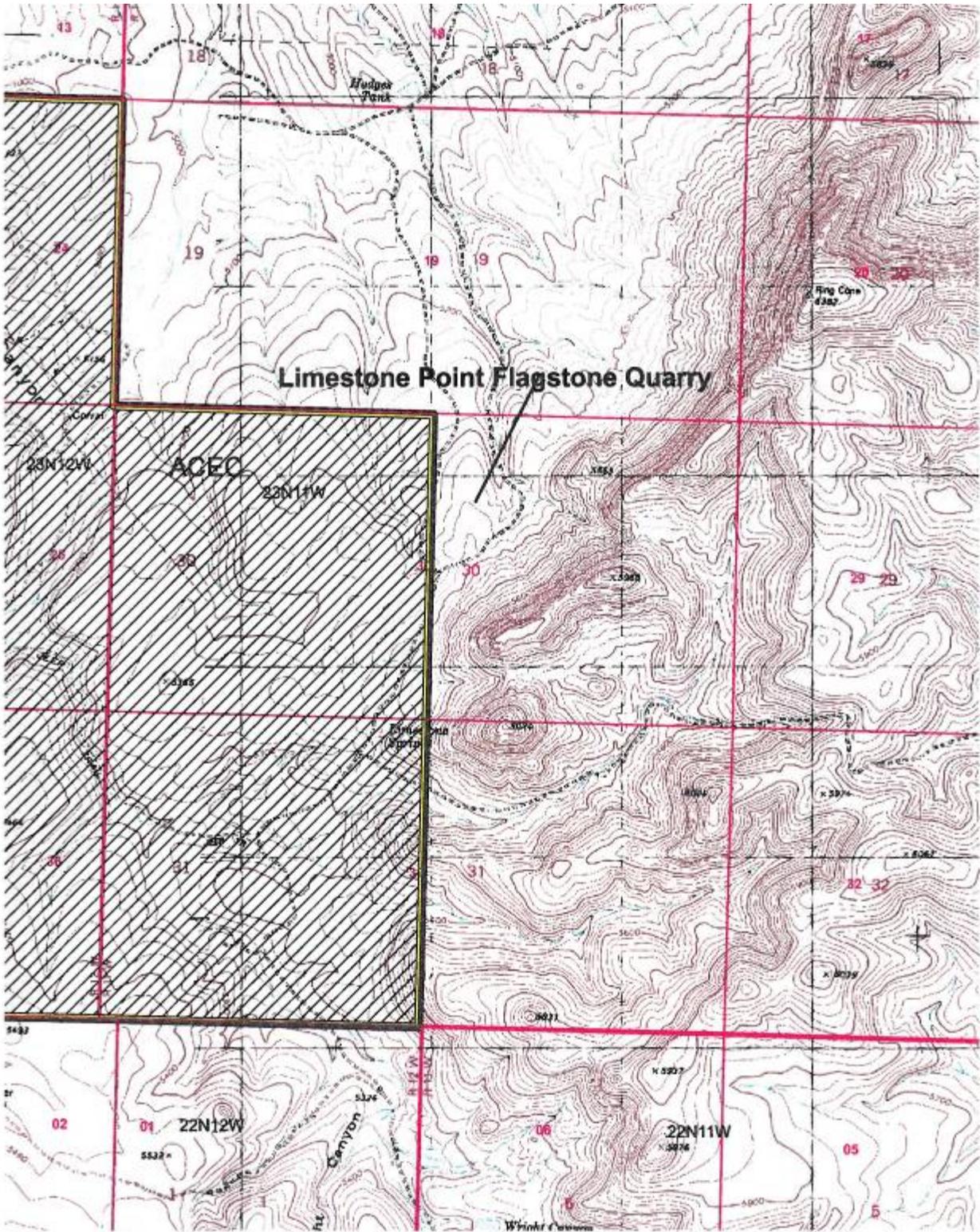
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Bureau of Land Management, Kingman Field Office
FINDING OF NO SIGNIFICANT IMPACT

NEPA Document Number: DOI-BLM-C010-2012-0007

Finding of No Significant Impact:

Based upon the analysis of potential environmental impacts contained in Environmental Assessment # DOI-BLM-AZ-CO10-2012-0007, incorporated herein, public involvement throughout the analysis, consideration of the context and intensity of the proposed action, (ten criteria described in 40 CFR 1508.27), and all other information available to me, it is my determination that impacts are not expected to be significant; therefore, an environmental impact statement is not required.

_____/ s / Ruben A Sanchez
Field Manager, Kingman

_____/ 12/20/2011
Date