

ENVIRONMENTAL ASSESSMENT

On an Application for an OPENCUT MINING PERMIT

The Montana Department of Environmental Quality (DEQ) prepared this Environmental Assessment (EA) in accordance with requirements of the Montana Environmental Policy Act (MEPA). An EA functions to identify, disclose, and analyze the impacts of a proposed action. This document may disclose impacts that have no legislatively required mitigation measures, or over which there is no regulatory authority.

The state law that regulates gravel mining operations in Montana is the Opencut Mining Act. This law and the rules adopted thereunder place operational guidance and limitations on a project during its lifetime, and provide for the reclamation of land affected by opencut mining operations.

Local governments and other state agencies may have authority over different resources and activities under their regulations. Approval or denial of this Opencut Application will be based on a determination of whether or not the proposed operation complies with the Opencut Mining Act and the rules adopted thereunder. The DEQ approval of this application would not relieve the operator from the obligation to comply with any other applicable federal, state, or county statutes, regulations, or ordinances. The operator is responsible for obtaining any other permits, licenses, approvals, etc. that are required for any part of the proposed operation.

APPLICANT: Wilks Ranch Holdings, LLC

COUNTY: Fergus

SITE NAME: Wilks

DATE: November 2011

LOCATION: Section 3, 4 & 5, T12 N, R22 E

PROPOSAL: The applicant proposes to permit a new, long-term gravel pit to mine, screen, crush, stockpile, and transport 1,400,000 cubic yards of gravel from a 90.8-acre site located 42 miles southwest of Grass Range. Additional processing equipment would include an asphalt plant and pug mill. There are currently two small landowner gravel pits within the proposed permit boundary on the far east and far west sides of the site.

A reclamation bond would be held by DEQ to ensure that final reclamation of the site to rangeland/pasture and internal roads would be completed by 2019. This application contains all items required by the Opencut Mining Act and its implementing rules. Proponent commits to properly conducting opencut operations and would be legally bound by the permit.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	<p>The site is located on a flat bench that slopes toward the South Fork Flatwillow Creek to the south. The Little Snowy Mountains are located to the southwest. The slopes range from 2 to 40% on what appears to be a stream terrace. The onsite soils consist of clay loam to gravelly loam. The operator will replace 11 inches of soil and 2 inches of overburden. The site receives approximately 16 inches of precipitation per year.</p> <p><i>Impacts:</i> An irreversible and irretrievable removal of gravel from the site would occur. A small impact to the quantity and quality of soils from salvaging, stockpiling, and resoiling activities also would occur, but this would not impair the capacity of the soils to support full reclamation. There are no unusual topographic, geologic, soil, or special reclamation considerations that would prevent reclamation success.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>Within 1,000 feet of the main permit area, there are streams, an ephemeral drainage, a spring, and an irrigation ditch. The site is located on a high bench. The surface water features are located at lower elevations to the north and south. There are no wells located within 1,000 feet. Water will be used for dust control, pug milling, and the asphalt plant. Water will be stored onsite in a water storage tank and a water truck will also be used.</p> <p><i>Impacts:</i> The proposed activities would have a minimal effect on the quantity and quality of the surface and groundwater resources.</p> <p><i>Cumulative:</i> Cumulative impacts by the proposed action would be negligible.</p>
3. AIR QUALITY	<p>Air quality standards are based upon the Clean Air Act of Montana and pursuant rules and are administered by the DEQ Air Resources Management Bureau (ARMB). Its program is approved by the Environmental Protection Agency (EPA). These rules and standards are designed to be protective of human health and the environment.</p> <p>Air quality permits would be required on the processing equipment before installment. Machinery, such as generators, crushers and asphalt plants, are individually permitted for allowable emissions. Best Available Control Technology (BACT) is the usual standard applied. Fugitive dust is that which blows off the pit floor, stockpiles, gravel roads, farm fields, etc. It is considered to be a nuisance but not harmful to health.</p> <p><i>Impacts:</i> Air quality standards as set by the federal government and enforced by the ARMB would allow minimal detrimental air impacts.</p>
4. VEGETATION COVER, QUANTITY AND QUALITY	<p>There are no known rare or sensitive plants or cover types present in the site area. Onsite vegetation consists of short grass prairie including prairie Junegrass, bluebunch wheatgrass, and various other pasture species; vegetation provides approximately 95% cover. The vegetation would be removed as soil is stripped and the site would be replanted with plant species compatible with the proposed reclaimed use.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation would occur.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>Although the area is used primarily for pasture, it also supports populations of deer, rodents, song birds, coyotes, foxes, raptors, insects and various other animal species. Population numbers for these species are not known.</p> <p><i>Impacts:</i> The proposed mine is expected to temporarily displace some individual species and it is likely that the site would be re-inhabited following reclamation to similar habitat.</p>
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:	<p>The Montana Natural Heritage Program (MNHP) lists the following one species of concern in the vicinity of the site:</p> <p>Cassin's Finch (<i>Carpodacus cassinii</i>) is the largest of the North American <i>Carpodacus</i> finches. Adult males have rose-red coloration on the head throat and upper breast, the crown is bright pinkish-red contrasting with the paler nape and back. Females have an overall brownish plumage. Cassin's Finches are short-distance elevational or latitudinal migrants in some parts of their range, the movements somewhat irregular and possibly dependent on food supply. Cassin's Finches occur in every major forest type and timber-harvest regime in Montana, including riparian cottonwood, but are especially common in</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	ponderosa pine and postfire forests; they occur less often in lodgepole pine, sagebrush, and grassland. Foods include seeds, especially of grasses, composites, conifers, alders, and birches, as well as buds, leaves, and invertebrates. In general a single-brooded species has 4 to 5 eggs per clutch, with an incubation period of 12 to 14 days. <i>Impacts:</i> None of the listed species have been found on this site. Even if suitable habitat did exist on this site, the disturbance area would be small and large areas of similar or identical habitat surrounds the site. The possible impact to these species would be minimal.
7. HISTORICAL AND ARCHAEOLOGICAL SITES	The Montana State Historic Preservation Office (SHPO) was notified of the application. It reported that no sites have been discovered previously on this property. A pedestrian survey of the area by DEQ personnel did not reveal any artifacts or signs of occupation. No signs were evident at depth in the previously disturbed area. Based on the lack of inventory and the ground disturbance required by this undertaking, SHPO feels that this project has the potential to impact cultural properties. They recommend that a cultural resource inventory be conducted in order to determine whether or not sites exist and if they will be impacted. <i>Impacts:</i> If during operations resources were to be discovered, activities would be temporarily moved to another area or halted until SHPO was contacted and the importance of the resources was determined.
8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY	There are no unusual demands on land, water, air or energy anticipated as a result of this project. <i>Impacts:</i> Negligible impacts to land, water, air, or energy would occur.

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	County zoning clearance has been obtained.
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	As seen on the aerial photo of the surrounding area, there are no nearby residences. <i>Impact:</i> This pit is being sited in this area because of the location of the resource, and to provide materials for maintenance projects on the property as well as to construct an air strip.
11. AESTHETICS	The site is located in a common pastureland area. There would be a temporary alteration of aesthetics while mining is under way. However, reclamation would return the area to a visually acceptable landscape. This project is considered to be long-term, i.e., planned to take eight years to complete. There are no nearby residences; therefore hours of operation will be unrestricted.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	Existing employees would mainly be utilized for this operation. There is low potential that this project would create a significant number of new jobs. <i>Impacts:</i> New employment opportunities would be limited.

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	The acreage listed in the proposal would be taken out of pastureland use. Upon completion of mining, the land would be reclaimed to rangeland/pasture and internal roads. <i>Impacts:</i> Pastureland production would be reduced as soil stripping and operations progress across the site. When the entire site is opened up for mining and mine-related activities, all pastureland activities would cease.
14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME	Local, state and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, etc., from the companies, employees, or landowners benefitting from this operation. Following reclamation, it is assumed the tax base would revert to pre-mine levels.
15. DEMAND FOR GOVERNMENT SERVICES	Limited oversight by DEQ Opencut Program personnel would be conducted in concert with other area activity when in the vicinity.
16. HUMAN HEALTH AND SAFETY	Any industrial activity will increase the opportunities for accidental injury. There are agencies that require specific safety measures are in place. If followed there is no reason to believe that significant safety issues would be present.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES	This activity would not inhibit the use of the identified resources.
18. NATIVE CULTURAL CONCERNS	<i>Impacts:</i> None identified.

19. Alternatives Considered:

- A. Denial Alternative: The Department would deny an application that does not comply with the Act and Rules. No impacts to the natural or human environment would occur.
- B. Approval Alternative: The Department would approve an application that complies with the Act and Rules. Impacts of this application are addressed in the body of the EA.

20. Public Involvement, Agencies, Groups or Individuals contacted: Montana State Historic Preservation Office, Montana Natural Heritage Program.

21. Other Governmental Agencies which May Have Overlapping or Sole Jurisdiction include, but may not be limited to: Fergus County Planning Department (zoning), Fergus County Weed Control Board, MSHA and OSHA (worker safety), DEQ ARMB (air quality) and Water Protection Bureau (groundwater and surface water discharge; stormwater), DNRC (water rights), and MDT (road access).

22. Regulatory Impact on Private Property: The analysis done in response to the Private Property Assessment Act indicates no impact. The Department does not plan to deny the application or impose conditions that would restrict the use of private property so as to constitute a taking.

23. Magnitude and Significance of Potential Impacts: This proposal is not likely to create impacts of significance due to mitigation, restrictions, and oversight mandated by the Opencut Mining Act and pursuant rules and the Montana Clean Air Act.

24. Recommendation for Further Environmental Analysis: EIS No Further Analysis

EA Prepared By: Kenley Stone Opencut Mining Program Environmental Specialist
 Name Title

EA Reviewed By: Chris Cronin Opencut Mining Program Supervisor
 Name Title

PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PPAA?

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deprive the owner of all economically viable uses of the property?
	X	4. Does the action deny a fundamental attribute of ownership?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 5a and 5b and continue with question 6.)
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property?
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? (If the answer is NO, skip questions 7a-7c)
		7a. Is the impact of government action direct, peculiar, and significant?
		7b. Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
		7c. Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.



P.O. Box 201800 • 1515 East Sixth Avenue • Helena, MT 59620-1800 • fax 406.444.0581 • tel 406.444.5354 • <http://mtnhp.org>

July 28, 2011

Stephanie Nadasi
MT DEQ
2001 11th Avenue
Helena, Montana 59601

Dear Stephanie,

I am writing in response to your recent request regarding Montana species of concern in the vicinity of Wilks Ranch Holdings, LLC - Wilks site - Permit 2156, in Sections 3, 4 and 5, T12N, R22E. I checked our databases for information in this general area and have enclosed 1 species occurrence report for 1 species of concern and a map depicting species of concern locations. Note that the maps are in Adobe GeoPDF format. With the appropriate Adobe Reader, it provides a convenient way to query and understand the information presented on the map.

Please keep in mind the following when using and interpreting the enclosed information and maps:

- (1) These materials are the result of a search of our database for species of concern that occur in an area defined by requested township, range and sections with an additional one-mile buffer surrounding the requested area. This is done to provide a more inclusive set of records and to capture records that may be immediately adjacent to the requested area. Reports are provided for the species of concern that are located in your requested area with a one-mile buffer. Species of concern outside of this buffered area may be depicted on the map due to the map extent, but are not selected for the SOC report.
- (2) On the map, polygons represent one or more source features as well as the locational uncertainty associated with the source features. A source feature is a point, line, or polygon that is the basic mapping unit of a Species Occurrence (SO) representation. The recorded location of the occurrence may vary from its true location due to many factors, including the level of expertise of the data collector, differences in survey techniques and equipment used, and the amount and type of information obtained. Therefore, this inaccuracy is characterized as locational uncertainty, and is now incorporated in the representation of an SO. If you have a question concerning a specific SO, please do not hesitate to contact us.
- (3) This report may include sensitive data, and is not intended for general distribution, publication or for use outside of your agency. In particular, public release of specific location information may jeopardize the welfare of threatened, endangered, or sensitive species or communities.
- (4) The accompanying map(s) display management status, which may differ from ownership. Also, this report may include data from privately owned lands, and approval by the landowner is advisable if specific location information is considered for distribution. Features shown on this map do not imply public access to any lands.
- (5) Additional biological data for the search area(s) may be available from other sources. We suggest you contact the U.S. Fish and Wildlife Service for any additional information on threatened and endangered species (406-449-5225). Also, significant gaps exist in the Heritage Program's fisheries data, and we suggest you contact the

Montana Fisheries Information System for information related to your area of interest (phone: 406-444-3373, or web site: <http://fwp.mt.gov/fishing/mFish/>).

- (6) Additional information on species habitat, ecology and management is available on our web site in the Plant and Animal Field Guides, which we encourage you to consult for valuable information. You can access these guides at <http://mtnhp.org>. General information on any species can be found by accessing the link to NatureServe Explorer.**

The results of a data search by the Montana Natural Heritage Program reflect the current status of our data collection efforts. These results are not intended as a final statement on sensitive species within a given area, or as a substitute for on-site surveys, which may be required for environmental assessments. The information is intended for project screening only with respect to species of concern, and not as a determination of environmental impacts, which should be gained in consultation with appropriate agencies and authorities.

I hope the enclosed information is helpful to you. Please feel free to contact me at (406) 444-3290 or via my e-mail address, below, should you have any questions or require additional information.

Sincerely,



Martin P. Miller
Montana Natural Heritage Program
martinm@mt.gov



Natural Resource Information System
Montana State Library
PO Box 201800
Helena, MT 59620-1800
(406)444-3009 mtnhp@mt.gov

Species of Concern Data Report

Visit <http://mtnhp.org> for additional information.

Report Date:
Thursday, July 28, 2011

Carpodacus cassinii

[View Species in MT Field Guide](#)

Common Name: Cassin's Finch

General Habitat: Drier conifer forest

Description: Vertebrate Animal

Mapping Delineation:

Observations with evidence of breeding activity buffered by a minimum distance of 300 meters in order to be conservative about encompassing the courtship and foraging distance from nesting areas and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters.

Species Status

[Click Status for Explanations](#)

Natural Heritage Ranks:

State: S3
Global: G5

Federal Agency Status:

[U.S. Fish & Wildlife Service:](#)
[U.S. Forest Service:](#)
[U.S. Bureau of Land Management:](#)

FWP CFWCS Tier: 3

MT PIF Code: 3

Species Occurrences

Species Occurrence Map Label:	291622	SO Number:	33
First Observation Date:	1994-06-01	Acreage:	46,991
Last Observation Date:	1994-06-01	SO Rank:	

From: Murdo, Damon
Sent: Wednesday, July 27, 2011 4:10 PM
To: Nadasi, Stephanie
Subject: RE: SHPO reports
Attachments: 2011072710-DEQ.xls



July 27, 2011

Stephanie Nadasi
Hard Rock/Openpit Programs
DEQ, Permitting & Compliance Division
P.O. Box 200901
Helena, MT 59620-0901

RE: WILKS RANCH HOLDINGS – WILKS SITE - PERMIT #2156. SHPO Project #: 2011072710

Dear Stephanie:

A file search of the statewide cultural resource information databases and a review of your letter resulted in the following information regarding the proposed project location:

- 1) **Previously recorded sites**
According to our records there have no previously recorded historic or archaeological sites within the designated search locale.
- 2) **Previous surveys conducted in the project area**
The absence of cultural properties in the area does not mean that they do not exist but rather may reflect the absence of any previous cultural resource inventory in the area, as our records indicated none.
- 3) **Previous disturbance in the area of potential effect**
Pasture/Rangeland.
- 4) **DEQ Gravel Source Inspection Form results**
None provided.
- 5) **Additional comment or information**
Based on the lack of inventory and the ground disturbance required by this undertaking we feel that this project has the potential to impact cultural properties. We, therefore, recommend that a cultural resource inventory be conducted in order to determine whether or not sites exist and if they will be impacted.

If you have any further questions or comments you may contact me at (406) 444-7767 or by e-mail at dmurdo@mt.gov. I have attached an invoice for the file search. Thank you for consulting with us.

Sincerely,

Damon Murdo
Cultural Records Manager
State Historic Preservation Office

File: DEQ/OPENCUT/2011