

ENVIRONMENTAL ASSESSMENT

Project Name: Keller

Proposed Implementation Date: April, 2001

Proponent: Yellowstone County

Type and Purpose of Action: The county proposes to mine and screen about 6,000 yards of gravel from a 9-acre rangeland site. The product would be used for county road projects in the vicinity over the years. Mining would occur to a depth of 30 feet. The site would be reclaimed to rangeland by the Fall of 2010.

Location: SE of the NE of Sec 30 T4N R32E

County: Yellowstone In EA 2000, December

N = Not present or No Impact will occur.

Y = Impacts may occur (explain under Potential Impacts).

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>[N] This rangeland site is located to the west of and adjacent to the Keller Welborn county road. The site is a Quaternary terrace. The site is bounded by draws to the south and north. The terrace is about 50 feet high on the east side. The main knob of gravel would be mined from the east to the west, which is the crested wheatgrass pasture.</p> <p>The soils are of alluvial origin. They are fairly deep, consisting of about 10 inches of loamy topsoil and several more inches of subsoil. Scrapers would be used for salvaging the soil materials.</p> <p>The site would be reclaimed to daylight to the east with 4:1 or flatter slopes so that grazing could continue. The north coulee has assorted trash piles in it. This area would not be disturbed.</p> <p>Annual precipitation is about 12 inches.</p> <p>The site should revegetate well.</p>
<p>2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>[N] No surface water is close to the site. No wells or springs are located in this section. Test pits did not intercept any groundwater. The nearest groundwater seems to be at the level of the Keller residence 1500 feet to the south and about 200 feet lower in elevation.</p> <p>The gullies to the south and north carry runoff during precipitation events and spring thaw. The site would be accessed from the county road. A culvert would be sized (probably 18 inches) and laid along the road to carry runoff from above the site to the larger gully to the south. Oversized material would be placed in the county ditch, particularly below the ditch, to impede erosion. No groundwater or surface water would be impacted by this operation.</p> <p>Yellowstone County uses fuel tanks carried in pickups, so no fuel would be stored on site. No trash would be buried on-site. Some oversized material would be used for erosion control along the county road, but otherwise, reject materials would be placed by the highwall and buried.</p> <p>No impacts are expected from this project.</p>
<p>3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[N] No designated Class I or Class II airsheds exist in the area. A water truck would be available for dust control on-site.</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[N] The site is presently used as rangeland and has a good cover of range grasses, including wheatgrasses, with a little sagebrush, and yucca. The western part of the site is in crested wheatgrass. Scrub pines inhabit the gullies.</p> <p>The site would be reclaimed to a 4:1 slope slanting away from the terrace face. The nature of the soils holds moisture and would allow good revegetation. This area would return to rangeland use after reclamation.</p>

	<p>No noxious weeds were seen on site; the county would control or eliminate any weeds that should invade the site.</p> <p>No rare species or cover types were found during a field inspection, and none were reported in an NRIS search.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] Some wildlife use the site. Deer, coyotes, and upland game birds have been observed. The small disturbance area would have little impact on wildlife.
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?	[N] The Montana Natural Heritage Program has no listings for the site. No wetlands are present on the site. No species of special concern are present.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] The State Historical Preservation Office has no listings for this area. During a field survey no evidence was found to indicate that any surface or subsurface cultural resources exist on site. If some resource were discovered, operations would be shifted to another area for a reasonable time period to allow for assessment of the new find.
8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	[N] The site is located on top of the terrace next to the county road. Temporary stockpiles and topsoil stockpiles would be visible from the county road. Noise from the operation would be heard. The plan calls for the pit to be open for 10 years.
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?	[N] This location has had several gravel operations nearby, one is the landowners pit directly across the road. The county considered using that area but the landowner did not want it expanded because he feeds cattle there. The test pit data indicates that the whole terrace top has quality gravel.
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other studies, plans or projects on this tract?	[N]

IMPACTS ON THE HUMAN POPULATION

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] During the times when the county is hauling out of the pit, truck traffic on the county road could create a minor increase in the safety risk.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N]
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] Most of the product from this operation would be used on county road projects. There would be no impact to employment.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] There would be no effect on taxes.
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?	[N] Truck traffic generated by this project would impact local residents during construction activity and could be annoying to the public, but it would not be dangerous or overburden the county's infrastructure.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N]
17. ACCESS TO AND QUALITY OF	[N] The recreational potential of this site is low because it is private ground.

RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	Impacts are not anticipated.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N]
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]

22. Alternatives Considered:

Alternative I: Alternate location of the site. Another pit location could be farther from the proposed use sites of the product, and thus would increase transportation costs and risks unnecessarily from this alternative.

Alternative II: Denial. This alternative would result in denying the use of a resource to the landowner.

23. Public Involvement, Agencies, Groups or Individuals contacted: Montana Natural Heritage Program, State Historic Preservation Office, Yellowstone County Weed Control District, Yellowstone County Commissioners, Yellowstone County Planning Board

24. Other Governmental Agencies with Jurisdiction, List of Permits Needed: Mine Safety & Health Administration for safety permit; Montana Department of Labor & Industry, Bureau of Safety for safety permit; MtDEQ Air and Waste Management Bureau for air quality permits,

25. Magnitude and Significance of Potential Impacts: Impacts are unlikely to be significant on the general environment because of the small area of disturbance and the short duration of the project.

26. Regulatory Impact on Private Property: The analysis conducted in response to the Private Property Assessment Act indicates no impact.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

EA Checklist Prepared By: Jo Stephen Title: Reclamation Specialist

Approved By: Jerry Burke Title: Opencut Mining Program Supervisor, IEMB

Signature

Date