

## ENVIRONMENTAL ASSESSMENT

**Project Name:** Flying M Ranch **Proposed Implementation Date:** Spring 97

**Proponent:** Flying M Ranch

**Type and Purpose of Action:** The proponent proposes to mine, crush, sort, stockpile, and transport 130,000 cubic yards of sand and gravel from a 14.0 acre site for use within the confines of the ranch. The site would be reclaimed by recontouring, respreading the topsoil and reseeding the site with grasses.

**Location:** NW¼, Sec. 23, T4S, R9E **County:** Park

**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><b>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b> Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>[N] The proposed operation is located in sands and gravels of an alluvial nature and lies on a terrace east of the Yellowstone River. The topsoil is of a silty loam texture and is approximately 12 inches deep. There is no overburden. Approximately 1 acre of the area of the proposed operation has been mined in the past. The topsoil would be stripped and stockpiled and after regrading would be evenly replaced. Microorganisms should invade the soil.</p>
<p><b>2. WATER QUALITY, QUANTITY AND DISTRIBUTION:</b> 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] The nearest surface water is an irrigation ditch which terminates onto the surrounding pasture land. The Yellowstone River lies approximately 1 mile to the west. The operation will be mined to the maximum depth of the terrace which is 14 feet. The estimated depth to the water table is 50 to 60 feet below the elevation of the toe of the terrace. Fuel storage tanks would be lined and bermed and be of sufficient size to contain any leaks or spills. The site upon reclamation would be daylighted to the west. The reclaimed pit floor will slope to the west. Silt fences will be installed if necessary to prevent any off site sedimentation or erosion. There are no water wells within 1,000 feet of the site. There should not be any impact to any ground or surface water.</p>
<p><b>3. AIR QUALITY:</b> Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[Y] Air quality would be degraded. The proponent must comply with air quality standards and Air Quality Permits obtained from the Montana Dept. of Environmental Quality for the crusher.</p>

<p><b>4. VEGETATION COVERS, QUANTITY AND QUALITY:</b> Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[Y] The entire area has been altered by agricultural activities including cultivation and the seeding of introduced species of vegetation such as bluegrass, crested wheatgrass, and smooth brome. Introduced species of grasses and legumes will be seeded onto the site upon recontouring and retopsoiling. A literature search was done by the Montana National Heritage Program and no rare plants or cover types were identified and none were identified during a ground search.</p>
<p><b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b> Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[N]</p>
<p><b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b> Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>[N] Ground and literature searches were conducted and no threatened or endangered a species or identified habitats were found on the site. No wetlands are present.</p>
<p><b>7. HISTORICAL AND ARCHAEOLOGICAL SITES:</b> Are any historical, archaeological or paleontological resources present?</p>	<p>[N] A cultural survey was conducted on the site and no cultural resources were found. If the operator of the proposed operation discovers any cultural resources the operation must be routed around the site of discovery for a reasonable amount of time until salvage can be made. The State Historical Preservation Office must be promptly notified.</p>
<p><b>8. AESTHETICS:</b> Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>[Y] The proposed operation is located within the Yellowstone River Valley which receives a considerable amount of tourism, but the site would not be visible from the main highway or the river.</p>
<p><b>9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:</b> Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?</p>	<p>[N]</p>
<p><b>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:</b> Are there other studies, plans or projects on this tract?</p>	<p>[N]</p>

**IMPACTS ON THE HUMAN POPULATION**

<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>11. HUMAN HEALTH AND SAFETY:</b> Will this project add to health and safety risks in the area?	[Y] There will be increased hazards because of equipment activity and hauling of the sand and gravel. The applicant must comply with OSHA and MSHA regulations however, proper precautions will be taken to avoid accidents.
<b>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</b> Will the project add to or alter these activities?	[Y] Until the site is successfully reclaimed, 14.0 acres will be removed from pasture.
<b>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</b> Will the project create, move or eliminate jobs? If so, estimated number.	[N]
<b>14. LOCAL AND STATE TAX BASE AND TAX REVENUES:</b> Will the project create or eliminate tax revenue?	[N]
<b>15. DEMAND FOR GOVERNMENT SERVICES:</b> Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?	[N] The site will require periodic site evaluations, but these will be done in conjunction with other operations in the area.
<b>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</b> Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] County Zoning clearance has been obtained.
<b>17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:</b> Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N]
<b>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:</b> Will the project add to the population and require additional housing?	[N]
<b>19. SOCIAL STRUCTURES AND MORES:</b> Is some disruption of native or traditional lifestyles or communities possible?	[N]

<b>20. CULTURAL UNIQUENESS AND DIVERSITY:</b> Will the action cause a shift in some unique quality of the area?	[N]
<b>21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</b>	[N]

**22. Alternatives Considered:**

Alternative # 1: Denial. The owner of the gravel resource would be denied full utilization of his property at this time.

**23. Public Involvement, Agencies, Groups or Individuals contacted:** Montana Natural Heritage Program & Park County Commissioners & Weed Control District

**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; Permitting and Compliance Division for crusher permit.

**25. Magnitude and Significance of Potential Impacts:** Impacts are unlikely to be significant on the general environment because of the small amount of disturbance and 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: Jerry Burke      Title: Mine Reclamation Specialist

Approved By: Steve Welch      Title: Industrial and Energy Minerals Bureau Chief

Signature

Date