

ENVIRONMENTAL ASSESSMENT

Project Name: Swainson

Proposed Implementation Date: January, 2001

Proponent: A. M. Welles, Inc.

Type and Purpose of Action: A. M. Welles, Inc. proposes to mine and crush about 32,000 yards of gravel from an 8.2 - acre site located on the first terrace above the Yellowstone River. They will also have an asphalt plant. The product would be used for a highway project in the vicinity. Mining would occur to a depth of 8 feet. The site would be reclaimed to pasture by the Fall of 2001.

Location: N½ of Sec 8 T5S 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>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 river terrace site is located 200 yards north of the Yellowstone River, between the river and Highway 89. The site is on the first terrace about 10 feet above the floodplain and does not flood during high water.</p> <p>The soils are of alluvial origin. They are shallow, ranging from 2 inches to 6 inches of loamy topsoil and 2 to 16 inches of coarse sand and cobbly subsoils and overburden. Scrapers or other available equipment would be used for salvaging the soil materials.</p> <p>The mine site would be reclaimed to pasture. Mining would extend from the floodplain into the terrace. At final reclamation it would look like a normal undulation in the terrace edge with 4:1 slopes. Both the floor of the pit and the facilities area would be flat. The landowner intends to install an irrigation system on this terrace to increase grass production on the 20 acre terrace.</p> <p>Annual precipitation is about 14 inches. With irrigation the site would revegetate well. Without it, vegetation is slow to establish because of the sand and gravel base.</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] The only surface water nearby is the Yellowstone River, located 250 yards to the south and southeast of the site.</p> <p>The terrace where the site is found is about 35 feet above the Yellowstone River. One household well 38 feet deep is located 200 yards southwest of the site on the floodplain. It taps into the shallow river aquifer. Test pits on site did not encounter groundwater. Because mining would go only 8 feet deep groundwater would not be intercepted.</p> <p>No trash would be buried on-site.</p> <p>No groundwater or surface water would be impacted by this operation.</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>[Y] Air quality would be degraded, but the proponent must comply with air quality standards and have Air Quality Permits from the Air and Waste Management Bureau of the Montana Dept. of Environmental Quality for the crusher and asphalt plant. A water truck would be available for dust control on-site. The crusher is equipped with spray bars. No designated Class I or Class II airsheds exist in the area.</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 a dryland pasture in very poor condition. The dominant species is spotted knapweed, with a few grasses and sage. Cover is approximately 40 percent.</p> <p>The site would be reclaimed to pasture. The landowner intends to construct an irrigation system on the site and has committed to fencing and not grazing</p>

	<p>for two years. The landowner has also requested the seed mix which includes Russian wildrye and crested wheatgrass. Although not native species, they will fulfill the requirements of reclamation and the landowner's future plans for pasture and haying.</p> <p>The site is heavily infested with spotted knapweed. The county-approved weed plan would control weeds through spraying the site and a 100-foot circumference around it, spraying the stockpiles during this growing season, and spraying twice each year for the next 2 years. The proponent also will provide herbicide to the county for spraying the highway project roadsides to prevent the spread of knapweed by latent seed in the gravel source. The site would be reclaimed and seeded this September.</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] Wildlife use the site only slightly because of the poor condition. Deer have been observed. The small disturbance area and short life span of the mine would have little impact on wildlife. After reclamation the site would probably be used far more often.
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, the SHPO would be notified and 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 about 200 yards from the river and 400 yards from Highway 89, and would be visible from both. Noise from the operation would be heard but would blend in with normal traffic noises. The plan calls for the pit to be open for 9 months. One residence is located within 1,000 feet of the mine area but farther from the crusher and asphalt plant sites. Crushing is scheduled for early this winter.
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 directly across the highway. The Yellowstone valley has a large, untapped gravel resource.
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. During construction, flagmen and other traffic control would be used to reduce hazards.
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] The product from this operation would be used on a highway road project this summer. There would be no impact to local 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 RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N] The recreational potential of this site is low because it is private ground. 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, Park County Weed Control District, Park County Commissioners

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