

## ENVIRONMENTAL ASSESSMENT

**Project Name:** Glenda Ohs      **Proposed Implementation Date:** Summer 97

**Proponent:** A.M. Welles

**Type and Purpose of Action:** The proponent proposes to mine, crush and transport 125,000 cubic yards of sand and gravel to be used to overlay with asphalt a state highway. The proponent would salvage soils, mine sand and gravel, recontour, creating a 6.5 acre pond up to 14 feet deep at high water and 4 feet deep at low water table that would be utilized for wildlife and watering livestock. The slopes above the low water line and the hardstand areas, crusher site, and mineral stockpile locations will be topsoiled and seeded. An asphalt plant will be set up at the site.

**Location:** NE<sup>1</sup>/<sub>4</sub>, Sec. 36, T1S, R2W      **County:** Madison

**N = Not present or No Impact will occur.**

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

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<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>[Y] The proposed site lies within the North Willow Creek alluvial valley and slopes down gradient to the north and east. This area is predominantly an alluvial deposit of Quaternary Age consisting of silt, sand, and gravel.</p> <p>The soils are of a sandy silty loam texture and are 6 inches deep. The soils would be salvaged prior to mining and replaced on the pond shoreline (down to the high water mark), crusher site, hardstand areas, and mineral stockpile sites following recontouring. There is no overburden to salvage. The site will be an extension of an existing gravel pit recently used by Gilman Excavating.</p> <p>Microorganisms should reinvade the site.</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>[Y] The nearest water well currently in use belongs to the landowner and is located approximately 1,000 feet of the site and is 62 feet deep and the static water table is at 10 feet. The landowner does have a water well approximately 500' north of the site which is 90 feet deep, but it is not used. The North Fork of Willow Creek is approximately 500 feet to the west. There is an old unreclaimed gravel pit adjoining the proposed mine site which currently has standing water to a depth of within 7 feet of the surface. The water within the old pit rises to within 2 feet of the surface. The proponent will mine the site and create a pond which will have a minimum of 4 feet of water during periods of a low water table. Deep water pockets will be constructed which will have a minimum of 12 feet of water during periods of low water will be created to assure the survivability of fish during low water. The site will be dewatered by constructing a dewatering trench around the site and pumping the discharge water from the site and land applying the water on an adjoining pasture down gradient from the gravel pit. Approximately 25 gallons per minute will be discharged from the outlet. No discharge permit is needed from the Montana Dept. Of Environmental Quality as the discharge water is not entering state water.</p> <p>There are several abandoned irrigation ditches and one irrigation ditch which is used once every few growing seasons. None of these ditches will be impacted.</p> <p>The applicant will berm and line any fuel and fuel storage areas to contain any petroleum-based products spills. The Department of Environmental Quality Water Protection Bureau has been contacted concerning the need for a Stormwater Discharge Permit.</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>[N] There will be an increase in airborne particulates while the soil is being salvaged, the gravel being crushed and hauled, and soil replaced. The applicant will need to secure an Air Quality Permit from the Montana Dept. of Environmental Quality prior to crushing activities and must abide with all applicable air quality guidelines. Spray bars will be placed on the crusher to suppress dust. The hard stand areas, soil stockpiles, and haul roads will be watered as necessary.</p>
<p><b>4. VEGETATION COVER, QUANTITY AND QUALITY:</b> Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[Y] Existing vegetation will be removed with the soil. Some roots may remain viable in the soil stockpile and regenerate upon replacement. The applicant will seed all affected land to species compatible with the post mine land use. The site currently contains native and non native grasses. The site will be seeded with native species of grasses. There are no threatened or endangered plants present.</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] The location of the proposed operation precludes the significant use of wildlife, although it would be expected to receive transient use by various avian species, deer and rodents.</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] The Montana Natural Heritage Program has not identified any threatened or endangered plant or animal species present on this site. There are no wetlands present on the site.</p>
<p><b>7. HISTORICAL AND ARCHAEOLOGICAL SITES:</b> Are any historical, archaeological or paleontological resources present?</p>	<p>[N] A Ground search by DEQ did not reveal the presence of any archaeological or historic values and clearance has been given by the State Historic Preservation Office. Should a significant archaeological or historical value be found, the operation will be routed around the site of discovery for a reasonable time until salvage can be made. The State Historic Preservation Office will 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>[N] The site will be visible from people traveling Highway 287 and from the town of Harrison which is approximately 0.5 miles to the south. The operation will operate from 8:00 a.m. to 4:30 p.m. Monday through Friday.</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] Zoning clearance has been obtained.</p>

<p align="center"><b>IMPACTS ON THE HUMAN POPULATION</b></p>	
<p align="center"><b>RESOURCE</b></p>	<p align="center"><b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b></p>
<p><b>11. HUMAN HEALTH AND SAFETY:</b> Will this project add to health and safety risks in the area?</p>	<p>[Y] The use of heavy mining and hauling equipment will increase the risk of accidents. However, the applicant must comply with OSHA and MSHA regulations and it is expected that safety considerations will be given the utmost attention.</p>

<p><b>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</b> Will the project add to or alter these activities?</p>	<p>[Y] 6.5 acres will be permanently removed from agricultural production (pasture). In its place will be a pond.</p>
<p><b>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</b> Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>[N]</p>
<p><b>14. LOCAL AND STATE TAX BASE AND TAX REVENUES:</b> Will the project create or eliminate tax revenue?</p>	<p>[N]</p>
<p><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?</p>	<p>[N] The site will require periodic site evaluations by DEQ staff, however they would generally be conducted in conjunction with other regional sites.</p>
<p><b>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</b> Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>[N] Zoning clearance has been secured from Madison County.</p>
<p><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?</p>	<p>[N]</p>
<p><b>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:</b> Will the project add to the population and require additional housing?</p>	<p>[N]</p>
<p><b>19. SOCIAL STRUCTURES AND MORES:</b> Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>[N]</p>
<p><b>20. CULTURAL UNIQUENESS AND DIVERSITY:</b> Will the action cause a shift in some unique quality of the area?</p>	<p>[N]</p>

<b>21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</b>	[N]
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**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; Madison County Weed Board and Commissioners; and the landowner.

**24. Other Governmental Agencies with Jurisdiction, List of Permits Needed:** Madison County for Zoning Compliance, & MSHA and OSHA for safety permits.

**25. Magnitude and Significance of Potential Impacts:** Not applicable. A finding of significance is relevant only to the requirement to prepare an EIS under MEPA. However, the statutory time constraints of the Opencut Mining Act preclude preparation of an EIS. Therefore, no such finding is necessary here.

**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  
Name

Program Coordinator  
Title

Approved By: \_\_\_\_\_  
Name Title

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Signature Date