# ENVIRONMENTAL ASSESSMENT

**Project Name:** Atwood/West Yellowstone **Proposed Implementation Date:** ongoing
**Proponent:** Bozeman Sand & Gravel, Inc.
**Type and Purpose of Action:** The proponent proposes to mine, crush, stockpile and transport up to 700,000 cubic yards of gravel from a 44 acre site for providing the local area with sand and gravel. There is an asphalt plant involved with this operation at various times. The site would be reclaimed to a pond, with slopes and other areas topsoiled and seeded with grasses. The reclaimed use would be ponds for waterfowl. Reclamation would be completed by December of 2006.

**Location:** SW¼, Sec. 16 & NW¼ Sec. 21, T12S, R5E **County:** Gallatin

**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** |
| **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? | **[N]** The proposed operation is located on the alluvial valley of the Madison River in sand and gravel deposited during the Quaternary era. The area has an average of 12 inches of sandy silt loam textured topsoil which would be salvaged and respread after recontouring down to the high water mark of the pond. There is no overburden. There are no fragile, compactible or unstable soils present, unusual geologic features, or special reclamation considerations. |
| **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? | **[Y]** There are no water wells within 1,000 feet. The water table at the site varies according to the level of Hebgen Lake. Normally May through September are when the lake is at its highest and the water level is approximately 12 feet below the elevation of the top of the ground. The water level will normally fluctuate approximately 4 feet, therefore the elevation to the lowest water table is approximately 16 feet below the elevation of the top of the ground. The site will be mined to a maximum depth of 35 feet.<br><br>The site would be dewatered by placing a suction hose in the bottom of the pit. The mine bottom would be sloped to drain to the suction hose. The suction hose inlet would be suspended either by being attached to steel post driven into the bottom or attached to an empty thirty-gallon drum. A pump running eight hours per day should keep the pit dewatered. Twenty feet of pipe would be connected to the outlet side of the pump. The discharge from pipe would be into a trench 10 feet long, 7 feet deep and 2 feet wide. As the trench becomes full the water would be discharged over the ground in a sheet. Due the topography of the area no discharge water would reach any state waters. The Montana Department of Environmental Quality, Water Protection Bureau, would require no discharge permit or stormwater permit. Any leaks or spills of petroleum-based products would be immediately cleaned up and properly disposed of. No fuel would be stored onsite. |
| **3. AIR QUALITY:** Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)? | **[Y]** Air quality would be degraded, but the proponent must comply with air quality standards, and Air Quality Permits obtained from the Montana Dept. of Environmental Quality for the crusher and asphalt plant. Water would be used to control any dust on the access road and facility area. |
| **4. VEGETATION COVER, QUANTITY AND QUALITY:** Will vegetative communities be permanently altered? Are any rare plants or cover types present? | **[N]** The vegetation in the area of the proposed operation contains smooth brome, wheatgrasses and bluegrass. The site has been cultivated in the past. There is a weed control plan from the Gallatin County Weed Board on the site. The site is monitored twice a year for weeds and any weeds are sprayed.ol plan with the Jefferson County Weed Board. Native and non-native grass species would be seeded upon recontouring and retopsoiling but will be different than what is currently growing on the site. The entire site has been |

| | |
|---|---|
| | disturbed and no rare plants or cover types were identified and none were identified during a ground search. |
| **5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:** Is there substantial use of the area by important wildlife, birds or fish? | **[N]** During different times of the year bison, elk and various species of birds are observed on or near the site. Due to the disturbed condition of the siste there is no substantial use of the site by 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 site is entirely disturbed by the mining of sand and gravel. The only water on the site is from the creation of a pond by mining. Ther is no vegetation in or surrounding the pond. |
| **7. HISTORICAL AND ARCHAEOLOGICAL SITES:** Are any historical, archaeological or paleontological resources present? | **[N]** Modern man has previously impacted the area. Therefore any cultural resources would have been destroyed. 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. |
| **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? | **[Y]** The site is highly visible from vehicle traffic coming to and from Yellowstone Park and from houses north and west of the site. When processing equipment are operating and when hauling is taking place there is noise. Topsoil berms are stratigically located to help eliminate some of the noise and visual impacts, but the topography is such that vehicles traveling south on US Highway 191 are able to see the operation. |
| **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]** |
| **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? | **[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, and proper precautions will be taken to avoid accidents. |
| **12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:** Will the project add to or alter these activities? | **[Y]** Acreage would be taken out of pasture/grazing and replaced with a pond. |
| **13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:** Will the project create, move or eliminate jobs? If so, estimated number. | **[N]** |
| **14. LOCAL AND STATE TAX BASE AND TAX REVENUES:** Will the project create or eliminate tax revenue? | **[N]** |
| **15. DEMAND FOR GOVERNMENT SERVICES:** 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. |
| **16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:** Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect? | **[N]** County Zoning clearance has been obtained. The area of the proposed operation is not zoned. |

| | |
|---|---|
| **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? | **[Y]** There are wilderness and recreational areas nearby, but none are accessed through the site. Currently, there is no recreational potential within the tract. |
| **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 # 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 & Gallatin County Weed Control District and Planning Dept

**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: Air and Waste Management Bureau for crusher and asphalt plant permits, Water Protection Bureau for possible water discharge permit & Jefferson County for a weed control plan.

**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 [ X ] No Further Analysis

EA Checklist Prepared By: Jerry Burke Title: Supervisor, Opencut Mining Program, IEMB

Approved By: Steve Welch Title: Bureau Chief, Industrial & Energy Minerals Bureau

_____ _____

Signature Date