

# ENVIRONMENTAL ASSESSMENT

**Project Name:** Logan (Thompson Chain of Lakes)

**Proposed Implementation Date:** in progress

**Proponent:** Montana Dept. Fish, Wildlife & Parks

**Type and Purpose of Action:** The applicant mined, stockpiled and hauled a total of 400 cubic yards of sand and gravel from a pit which is located 30 miles west of the town of Marion. Estimated start date was 1995 or earlier .

The pit will be graded to match the surrounding topographical features, topsoiled to match surrounding area soils and seeded to fescue grass. The landowner, Plum Creek Timber Company will let the site return to forest and eventual timber production.

**Location:** NE<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> Sec. 3, T26N, R27W

**County:** Lincoln

**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
<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?	<b>[N]</b> Up to 10 inches of well drained, dusty silt loam topsoil overlies the glacial sands and gravels surrounding the existing pit. Local terrace slopes demonstrate reasonably good stability, and ripping after activities are complete should alleviate soil compaction. No soils were salvaged from the site in the past, if soil material is found soil material will be salvaged and stockpiled away from the affected land. The proponent would import soil material. Following mining, grading and ripping, the soils will be replaced, disked and seeded to stabilize the soil and prevent erosion. Microbes are expected to re-colonize the soil.
<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?	<b>[N]</b> Middle Thompson Lake is located ¼ mile south of the site but will not be affected by the mine. Any accidental spills or major leaks from equipment operating in the pit will immediately be excavated and removed from the site. Therefore, the potable water is not expected to be adversely impacted.
<b>3. AIR QUALITY:</b> Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	<b>[Y]</b> Air quality will be degraded under this operation. Dozers, loaders and trucking equipment typically cause dusty conditions in disturbed soil sites. The site is not located within a Class 1 airshed.
<b>4. VEGETATION COVERS, QUANTITY AND QUALITY:</b> Will vegetative communities be permanently altered? Are any rare plants or cover types present?	<b>[N]</b> Vegetation consists of forest land, Douglas fir, Western larch and Ponderosa pine, and all will be removed during mining. The ground will be re-planted with grasses for aesthetics and to protect the replaced soils. Timber will be allowed to invade the site for future timber production. No rare plants or cover types were identified and none were identified during a ground search.
<b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b> Is there substantial use of the area by important wildlife, birds or fish?	<b>[N]</b> Although the area is used primarily for mining and logging, it also supports populations of deer, rodents, birds, insects and various other animal species. The mine site is frequented by those animals and they will be temporarily displaced as the mine is operated. The mine is not expected to significantly degrade wildlife populations.

<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] Site evaluations have not revealed any other endangered or threatened plant or animal species on site that would be significantly impacted. An Environmental Assessment prepared by Fish, Wildlife &amp; Parks in March of 1998 for a proposed land exchange between them and Plum Creek Timber Company surrounding this tract did not reveal any unique, endangered, fragile or limited environmental resources.</p>
<p><b>7. HISTORICAL AND ARCHAEOLOGICAL SITES:</b> Are any historical, archaeological or paleontological resources present?</p>	<p>[N] Although there are important cultural values in the general area, this site has been previously disturbed by modern man, thus destroying the integrity of resources that may have existed. A surface reconnaissance did not discover any cultural, historical or archeological resources. If significant resources are found, the operation will be routed around the site of discovery for a reasonable time until salvage can be conducted. The State Historical Preservation Office will be promptly notified. The 1998 FW&amp;P EA likewise found no potential for these resources.</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] There will be a deterioration of aesthetics while the operation is under way. However, reclamation will leave the site in a landscape condition that is compatible with the surrounding area. There is and has been an alteration of the viewshed as a result of the existing sand and gravel mine and logging. The viewshed has been altered by other man made modifiers such as the highway and park facilities at Logan State Park. The site is not visible by traffic along State Highway 2.</p> <p>Noise levels are generally within the range of 60 to 90 decibels measured on-site, decreasing with distance. As a comparison, sound levels for ordinary activities such as close conversation at 60 decibels and music from a radio at 70 decibels are considered to be moderate. Levels above 90 decibels are severe, and prolonged exposure can lead to hearing loss.</p> <p>These impacts are intermittent and of relatively short duration but are in addition to the noise created by the increased truck traffic hauling to various projects.</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] This site will not affect the proposed FW&amp;P/Plum Creek land exchange in the area.</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] Heavy equipment and facilities including trucks and loaders will create hazards, but the operator must comply with all MSHA and OSHA regulations. The operator will employ proper precautions to avoid accidents. Signage and flaggers would reduce traffic dangers during times of heavy truck traffic entering and leaving the site.</p>

<b>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</b> Will the project add to or alter these activities?	<b>[N]</b> The acreage listed in the Type and purpose of Action will be taken out of forest habitat and put into industrial/commercial use. Upon completion of mining, the land will be reclaimed to a grassy site useable by wildlife.
<b>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</b> Will the project create, move or eliminate jobs? If so, estimated number.	<b>[N]</b>
<b>14. LOCAL AND STATE TAX BASE AND TAX REVENUES:</b> Will the project create or eliminate tax revenue?	<b>[N]</b>
<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?	<b>[N]</b> The operation will require periodic site evaluations by DEQ staff. However, these evaluations are usually performed in conjunction with other area operations. The site is finished as a gravel source and will therefore not add further substantial traffic to the Highway.
<b>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</b> Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	<b>[Y]</b> This site is in the area of the Thompson Chain-Of- Lakes land exchange proposed between the Fish, Wildlife and Parks Department and Plum Creek Timber Company. Environmental analysis of the exchange has been completed and is attached to this application for reference.
<b>17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:</b> Are wilderness or recreational areas nearby or accessed through this tract?	<b>[N]</b> Access to the Tallulah and Slimmer Creek drainages as well as Lost Lake passes by the entrance to the pit. The pit is visible to that traffic, but traffic does not pass through the pit for access.
<b>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:</b> Will the project add to the population and require additional housing?	<b>[N]</b>
<b>19. SOCIAL STRUCTURES AND MORES:</b> Is some disruption of native or traditional lifestyles or communities possible?	<b>[N]</b> This is a very old gravel pit and has been in service off and on for many years.
<b>20. CULTURAL UNIQUENESS AND DIVERSITY:</b> Will the action cause a shift in some unique quality of the area?	<b>[N]</b>
<b>21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</b>	<b>[N]</b>

**22. Alternatives Considered:**

**No Action:** The pit has already been mined. If the permit is not granted, there will be no legal oversight or regulation of reclamation on the site.

**Approval of Application as submitted:** The pit would be reclaimed as requested.

**23. Public Involvement, Agencies, Groups or Individuals contacted:** Montana Fish, Wildlife and Parks, Montana Natural Heritage Program, State Historic Preservation Office.

**24. Other Governmental Agencies with Jurisdiction, List of Permits Needed:** None

**25. Magnitude and Significance of Potential Impacts:**

Impacts of this permit are unlikely to be significant on the environment because of its limited size, lack of human population density and lack of significant or critical wildlife habitat or species.

**26. Regulatory impact on private property:** The analysis conducted in response to the Private Property Assessment Act indicates no impact since this Plan of Operations would not require "Special Stipulations" in order to comply with the Opencut Mining Act.

**Recommendation for Further Environmental Analysis:**

EIS

More Detailed EA

No Further Analysis

EA Prepared By: Rod Samdahl

Title: Reclamation Specialist

Approved By: Jerry Burke

Title: Supervisor, Opencut Program, IEMB

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Signature

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Date