

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Mikes Brothers, LLC
Proposed Implementation Date:	2018
Proponent:	Mikes Brothers LLC
Location:	Surface and Minerals- T19N-R2E-Sec 31 (Lot 3, NW4)
County:	Cascade

I. TYPE AND PURPOSE OF ACTION

Mikes Brothers, LLC (Henceforth referred to as the proponent) has requested to conduct excavation of gravel test holes on the State Trust land mentioned above. This project would utilize a backhoe to dig holes to a depth of up to 20 feet in depth and backfill the holes once they have been evaluated. The proposed test pits are located in an area of high gravel demand.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

The proponent has submitted a Permit to Test for Aggregate to the DNRC to explore for gravel resources. The Central Land Office (CLO) and Minerals Management Bureau staff have conducted a field review on the project on August 16, 2018. The proponent is also the surface lessee for the tracts of land within the proposed area to test and has been in touch with the DNRC to discuss potential impacts.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

None are known.

3. ALTERNATIVES CONSIDERED:

Alternative A- Allow the proponent to conduct the test hole survey of these parcels of State Trust Land

Alternative B- No Action

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Alternative A- Site geology consists of up to 20 feet of alluvial terrace located in the northeast corner bench of the project consisting of stratified, moderate to well sorted sand and gravel deposits. The Taft member of the Blackleaf formation outcrops downslope of proposed project location and expected to be the lower limit of gravel deposits. This outcrop feature consists of weathered shale with medium to coarse grained glauconitic sandstone. The outcrop drops abruptly down into an abandoned channel of the Missouri River.

Overlying soils include Ervide loamy fine sand and Tally fine sandy loams. Care would be taken to preserve the soil when digging the test holes by separating the soil from the subsoil material. The soils are susceptible to

weed infestation once replaced and will be monitored thereafter. The soils in the proposed project area are rated as resilient and having the capability to recover well and restore natural vegetation.

Alternative B- No Impacts expected

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

Alternative A- Test hole sites are proposed to be located 300-400 feet from the abandoned river channel, which exhibits marsh-like characteristics. The possibility exists of encountering a perched aquifer while digging in the alluvium as indicated by a nearby spring which emerges from the bedrock approximately 50 feet lower in elevation than the proposed test pit locations.

Alternative B- No Impacts Expected

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Alternative A- No significant impact expected.

Alternative B- No Impacts Expected

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Alternative A- Vegetation communities may be affected by this project. The use of equipment has the potential to damage some areas of the plant community. This may come from the vegetation being compacted and excavated by equipment. Damage to the plant community should be lessened at this time of year since most species will be entering dormancy. There is no evidence of rare plants or cover types in the scope of the project. Current plant species which occupy the survey area include primarily Blue Bunch Wheatgrass (*Agropyron Spicatum*) and various forbs within the uncultivated areas and a mix of alfalfa, pubescent wheatgrass, and smooth brome in the previously cultivated and CRP areas.

Alternative B- No Impacts expected

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Alternative A- There may be minimal disruption to the wildlife that inhabit the area. The scale and length of the project should not be enough to permanently disrupt the wildlife species. Species in the area include whitetail and mule deer, antelope, raptors and other birds, various rodents, rabbits, reptiles and others.

Alternative B- No Impacts Expected

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Alternative A- A search of the Montana Natural Heritage Database shows that no species of concern were noted within the general project area; although, during the August 16, 2018 site visit, blue herons were identified in the abandoned riverbed marsh located west of the project area.

Alternative B- No Impacts Expected

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

Alternative A- A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that no cultural or paleontological resources have been identified in the APE. Because much of the area of potential effect on state land was once cultivated, because the Holocene age soils in the APE are relatively thin, and because the local geology is not likely to produce caves, rock shelters, or sources of tool stone, no additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

Alternative B- No Impacts Expected

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Alternative A- Very little impact should be felt aesthetically in the scope of this project. There should be minimal lasting affects on the landscape from this project. The project should only last a couple days and the landscape will be allowed to recover.

Alternative B- No Impacts Expected

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

Alternative A- No impacts expected.

Alternative B- No Impacts expected

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

None known

IV. IMPACTS ON THE HUMAN POPULATION
<ul style="list-style-type: none">• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i>• <i>Enter "NONE" if no impacts are identified or the resource is not present.</i>

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Alternative A- Typical safety risks for laborers working with mechanized equipment would be present, but the potential risk should be minimal with proper safety efforts.

Alternative B- No Impact Expected

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

Alternative A- The proposed project is for testing a resource only and would have minimal effects on industrial, commercial, and agricultural activities.

Alternative B- No Impacts Expected

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

Alternative A- This project would have minimal effects on creating, moving, or eliminating jobs.

Alternative B- No Impacts Expected

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Alternative A- No Impacts Expected

Alternative B- No Impact

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

Alternative A- No Impacts Expected

Alternative B- No Impact

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

Alternative A- No Impact Expected

Alternative B- No Impact

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Alternative A- No Impacts Expected

Alternative B- No Impact

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

Alternative A- No Impacts Expected

Alternative B- No Impact

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

Alternative A- No Impacts Expected

Alternative B- No Impact

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

Alternative A- No Impacts Expected

Alternative B- No Impact

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Alternative A- This project will provide the trust with the potential for future development of aggregate resources and royalty income.

Alternative B- No Impact

EA Checklist Prepared By:	Name: Bryan Allison	Date: August 2018
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V. FINDING

25. ALTERNATIVE SELECTED:

Alternative A

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

The granting of the requested aggregate test pits on these tracts of state-owned trust lands should not result in nor cause significant negative environmental impacts. The proposed action satisfies the trusts fiduciary mandate and ensures the long-term productivity of the land. An environmental assessment checklist is the appropriate level of analysis for the proposed action.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS More Detailed EA No Further Analysis

EA Checklist Approved By:	Name: Monte Mason	
	Title: Bureau Chief, Minerals Management Bureau	
Signature:	Monte & Mason	Date: 8/31/2018



