CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Exploration of Gravel Resource
Proposed Implementation Date: 2022
Proponent: Knife River
Location: T19N-R2E-Sec 21
County: Cascade

I. TYPE AND PURPOSE OF ACTION

Knife River (Henceforth referred to as the proponent) has applied for a gravel test permit on Trust Lands mentioned above. This project would utilize a backhoe and core truck to dig holes to a depth of approximately 20 feet in depth. The holes would be backfilled once they have been evaluated.

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. A field review to evaluate the proposal has been scheduled for the DNRC archaeologist and Minerals Management staff. The Helena Unit manager has been notified.

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

None

3. ALTERNATIVES CONSIDERED:

No Action Alternative – No Action

Action Alternative - Allow the proponent to conduct the test hole survey on State Trust Land.

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.

No Action Alternative – No impact

Action Alternative - Site geology consists of alluvial-terrace deposit, consisting of gravel in a matrix of a silty sand matrix. The geomorphology of the site has been shaped by alluvial processes – either by glacial drainage flows or historic positions of the Missouri River, or a combination of both. The site is characterized by terraces above the Missouri River Valley.

Overlying soils are composed of gravelly to cobbly sandy loams. Care would be taken to preserve the soil when digging the test holes by separating the soil from the underlying material. The soils are susceptible to weed infestation once replaced and will be monitored thereafter.
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.

No Action Alternative – No impact

Action Alternative - Test hole sites are proposed to be located approximately 120 to 150 feet in elevation above the Missouri River and from 2,500 to over 3,000 feet west of the river itself. There are no modern surface water features present onsite. Test holes would extend approximately 8 to 12 feet below ground surface and would be very unlikely to encounter any groundwater. Well logs drilled on the same landform within the tract report static water levels ranging from 51 to 73 feet below ground surface. The proposed test pits would have negligible effect on any water resources.

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.

No Action Alternative – No impact

Action Alternative – Some dust particulates may affect air quality temporarily during gravel testing operations. There is no anticipated long term affects to air quality.

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.

No Action Alternative - No impact

Action Alternative - Vegetation communities would be affected by this project. The use of mining equipment would temporarily damage some areas of the plant community. This would occur 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 project. Current plant species which occupy the survey area primarily include western wheatgrass, thinskew wheatgrass, green needlegrass, blue grama, needle and thread and various other grasses and forbs.

Disturbed areas would be reseeded with a native plant seed mix.

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.

No Action Alternative - No impact

Action Alternative - 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, etc.

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.

No Action Alternative - No impact
Action Alternative - A search of the Montana Natural Heritage Database shows that no species of concern were noted within the general project area during the last ten years.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
   Identify and determine effects to historical, archaeological or paleontological resources.
   No Action Alternative – No impact
   Action Alternative – Consultations with the DNRC Archaeologist and Montana Historical Society office have been initiated. Any resources can be avoided with backhoe trench excavation for gravel exploration and assessment work, the proposed project will result in No Effect to Antiquities as defined under the Montana State Antiquities Act. A formal report of findings pertaining to the 2018 inventory work is forthcoming."

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.
   No Action Alternative - No impact
   Action Alternative - Very little impact would be felt aesthetically during this project. There would be minimal lasting affects on the landscape from the excavation of test pits. The project would only last one or two days.

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.
   No Action Alternative - No impact
   Action Alternative - 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 NEPA review (scoped) or permitting review by any state agency.
   None known

IV. IMPACTS ON THE HUMAN POPULATION
   - 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.

14. HUMAN HEALTH AND SAFETY:
   Identify any health and safety risks posed by the project.
   No Action Alternative - No impact
   Action Alternative - Typical safety risks for laborers working with mechanized equipment would be present, but the potential risk would be minimal with proper safety efforts.
15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

No Action Alternative - No impact

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

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.

No Action Alternative - No impact

Action Alternative - This project would have no effects on creating, moving, or eliminating jobs.

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.

No Action Alternative - No impact

Action Alternative - No impacts expected

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

No Action Alternative - No impact

Action Alternative - No Impacts expected

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.

No Action Alternative - No Impact

Action Alternative - No impacts expected

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.

No Action Alternative - No impact

Action Alternative - On the day that machinery is actively digging test holes, there may be some disruption to recreational activities as the site is legally accessible.

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.

No Action Alternative - No impact

Action Alternative - No impacts expected
22. SOCIAL STRUCTURES AND MORES:
   Identify potential disruption of native or traditional lifestyles or communities.
   No Action Alternative - No impact
   Action Alternative - No impacts expected

23. CULTURAL UNIQUENESS AND DIVERSITY:
   How would the action affect any unique quality of the area?
   No Action Alternative - No impact
   Action Alternative - No impacts expected

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.
   No Action Alternative - No impact
   Action Alternative - This project will provide the trust with the potential for future development of aggregate resources and royalty income.
25. ALTERNATIVE SELECTED:

Action Alternative

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

The granting of the requested aggregate test permit pits on this tract 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 is the appropriate level of analysis for the proposed action.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

- [ ] EIS
- [ ] More Detailed EA
- [x] No Further Analysis

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Date: 7/8/22