

PROGRAMMATIC ENVIRONMENTAL ASSESSMENT

Project Name:	Programmatic Environmental Assessment – Aggregate Testing on State of Montana School Trust Lands
Proposed Implementation Date:	2024/2025
Proponent:	DNRC
Location:	Statewide
County:	NA
Trust:	NA

I. TYPE AND PURPOSE OF ACTION

The Montana Department of Natural Resources and Conservation (the Department or DNRC) through its Minerals Management Bureau (MMB), manages the aggregate (gravel, sand, rock) program on State of Montana School Trust Lands (trust lands). As part of this program, the MMB is responsible for aggregate testing on trust lands. Aggregate testing is the process of utilizing either mechanized equipment such as an excavator, or non-mechanized equipment such as a shovel to dig a hole and obtain information about the substrate underlying the surface. After the necessary information is collected, the holes are backfilled with the same material that was excavated. Topsoil that was saved, is then spread across the disturbance and the site is seeded with a site-specific seed-mix prescribed by the Department. Typically, three to twenty test holes are dug over a one- or two-day timeframe.

Annually, the Minerals Management Bureau receives approximately twenty aggregate testing permit applications statewide. Currently, each permit application is evaluated via a narrative environmental assessment (EA). Through the construction of these documents, it has become apparent to the MMB staff, that the resource effects identified for these projects are largely consistent throughout the state and rarely are significant impacts identified through the analysis. This observation led the MMB staff towards evaluating the potential of a programmatic analysis for aggregate testing applications. According to *A Guide to the Montana Environmental Policy Act*, which is published by the Legislative Environmental Policy Office; “State agencies are provided with the option of defining, through either rulemaking or a programmatic environmental review, the types of actions that seldom, if ever, cause significant impacts” p28.

A programmatic analysis of aggregate testing applications would streamline the permitting process for applicants and would streamline workload for the Department. This document will analyze the impacts of aggregate testing that are consistent across the program. Mitigations for these impacts will be listed at the end of each resource section. These mitigations would be adopted as standard stipulations for any future aggregate testing permits. This analysis will also identify instances where impacts are unique and site specific. These occurrences would be addressed by a formatted checklist EA. If impacts beyond those identified in this programmatic analysis are identified, or if impacts are site specific, further analysis for the resource should occur within the checklist assessment.

The potential adoption of this programmatic analysis would be the basis for all trust lands aggregate testing applications in the next ten years. If adopted, this analysis should be reviewed and edited for accuracy and applicability after ten years from its adoption.

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 MMB conducted an internal scoping period to identify potential resource issues and concerns that are important to local area staff and other trust lands bureaus.
- On August 8th, 2024, the MMB published an external 30-day scoping document and public notice on the DNRC website that solicits public comment to inform this analysis. This same notice was published in both the Helena IR and the Billings Gazette on August 15th and 22nd, 2024. No scoping comments were received from the public.
- A draft version of this document was published for public review, and legal notice was published in both the Billings Gazette and the Helena IR informing the public of the draft and their ability to comment on its adequacy. No comments were received during the 30-day comment period.
- Because no comments were received during initial scoping or during a subsequent comment period related to the adequacy of the analysis, the Department chose not to host a public hearing for this analysis.
- No comments were received, therefore there is no response to public comments associated with this analysis.

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

In general, there are no other permits needed to test for aggregate on State of Montana Trust Lands. However, certain areas may require additional authorizations. For example, a testing area that would be accessed through non-trust lands would require authorization from the landowner. Another example includes projects that occur in sage grouse habitat; which require consultation through the Montana Sage Grouse Habitat Program of the Montana DNRC.

3. ALTERNATIVES CONSIDERED:

No Action Alternative: The no action alternative would reject the adoption of this programmatic analysis for aggregate testing on State of Montana Trust Lands. Each application for aggregate testing would be analyzed as it currently is – via a narrative environmental assessment.

Action Alternative: This programmatic analysis would be adopted by the Minerals Management Bureau and serve as a basis for all aggregate testing applications over the next ten years. A list of standard mitigations that would be applied to all aggregate testing permits will be created, and a checklist for unique and project specific considerations would also be developed and utilized in place of a narrative EA.

SUMMARY OF POTENTIAL IMPACTS

The impact analysis will identify and estimate whether the impacts are direct or secondary impacts. Direct impacts occur at the same time and place as the action that causes the impact. Secondary impacts are a further impact to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action (ARM 17.4.603(18)). Where impacts would occur, the impacts will be described.

Cumulative impacts are the collective impacts on the human environment within the borders of Montana of the Proposed Action when considered in conjunction with other past and present actions related to the Proposed Action by location and generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through preimpact statement studies, separate impact statement evaluation, or permit processing procedures.

Where impacts are expected to occur, the impacts analysis estimates the duration and severity of the impact.

The duration of an impact is quantified as follows:

- **Short-term:** impacts that would not last longer than the proposed operation of the site, including reclamation of the site.
- **Long-term:** impacts that would remain or occur following reclamation of the proposed site.

The severity of an impact is measured using the following:

- **No impact:** There would be no change from current conditions.
- **Negligible:** An adverse or beneficial effect would occur but would be at the lowest levels of detection.
- **Minor:** The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- **Moderate:** The effect would be easily identifiable and would change the function or integrity of the resource.
- **Major:** The effect would alter the resource.

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.

Alternatives

No Action Alternative: The geology, soil quality, stability, and moisture would continue to be evaluated on a site-by-site basis within a narrative EA.

Action Alternative:

Direct Impacts: Geology and soil quality, stability and moisture vary widely across the State of Montana. However, despite the uniqueness from site to site, the impacts from aggregate testing to these resources are largely consistent throughout the state. The first step in aggregate testing is to remove and stockpile topsoil from the underlying substrate. Next, the substrate is excavated and stored in a separate pile. After measurements and pictures have been taken, the substrate is replaced, and topsoil is spread over the disturbance and seed is spread. Negligible losses in topsoil do occur during testing operations. Pre-testing quality, stability and moisture are expected to be achieved upon reclamation. Overall, the impacts to soil quality, stability and moisture are negligible and short-term. In areas where soils are more susceptible to erosion or loss, the Minerals Management Bureau typically implements a mitigation that no testing shall occur in topography greater than a 4:1 slope or during wet or muddy conditions. This mitigation should be adopted as a standard mitigation and be included in all testing permits. A section for unique geology shall be included in the EA checklist.

Secondary Impacts: Minimal soil disturbances may occur from driving or tracking equipment from test hole site to test hole site. However, under dry or frozen conditions, the impacts to soil quality, stability and moisture are negligible. Any secondary impacts would be short-term.

Cumulative Impacts: Cumulative impacts to geology and soil quality from aggregate testing are expected to be negligible. Aggregate testing does not impact a large enough area to change the cumulative impacts of geology or soil.

Duration: Aggregate testing usually takes place over one or two days. The disturbance created from aggregate testing is backfilled and blended immediately after the hole has been excavated. Typically, full reclamation of vegetation occurs within one or two growing seasons. Impacts to geology and soil quality, stability, and moisture are short-term.

Standard Mitigations:

The following mitigations are proposed as standard mitigations, which means they would be incorporated into all future aggregate testing permits if the action alternative is selected:

- The permittee shall only conduct testing operations under dry or frozen conditions. Testing under wet or muddy conditions is not allowed under this permit.
- No testing shall occur in areas where the slope is steeper than 4:1.

EA Checklist Items

The following checklist items are proposed for the checklist EA review that would occur for each application if the action alternative is selected:

- Will the project impact any unique geologic features?
 - Yes or No? If yes, further evaluation is required.

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.

Alternatives

No Action Alternative: The water quality, quantity and distribution would continue to be evaluated on a site-by-site basis within a narrative EA.

Action Alternative:

Direct Impacts: Aggregate testing does not have significant direct impacts on water quality, quantity or distribution. Groundwater may be encountered during testing on some sites depending upon its proximity to surface. However, the impacts to the quality, quantity and distribution of groundwater in this scenario is negligible. Some local turbidity may occur during testing operations that causes the ground water to be muddied. The water would be expected to settle within several minutes, and return to its original properties. On sites where ground water is not encountered during testing operations, there are no impacts to water quality, quantity or distribution.

Surface water quality is not impacted by aggregate testing operations, as a standard mitigation, the Minerals Management Bureau enforces a 100-foot setback from all surface water including wetlands. Aggregate testing operations do not disturb a large enough area to discernably change runoff or infiltration characteristics of a site.

Secondary Impacts: There are no secondary impacts to groundwater or surface water quantity, quality or distribution from aggregate testing.

Cumulative Impacts: The cumulative impacts to water quality, quantity and distribution are negligible. The impacts are not significant enough to change cumulative impacts to water quality, quantity and distribution at the site.

Duration: Any impacts to water quality, quantity and distribution would be short-term and only last during aggregate testing operations, which typically take one or two days.

Standard Mitigations:

The following mitigations are proposed as standard mitigations, which means they would be incorporated into all future aggregate testing permits if the action alternative is selected:

- The permittee shall abide by a 100-foot buffer from all surface water including wetlands.

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.

Alternatives

No Action Alternative: Air quality would continue to be evaluated on a site-by-site basis using a narrative EA.

Action Alternative

Direct Impacts: Aggregate testing creates small and temporary impacts to air quality. When the permittee digs the test hole, small amounts of dust may propagate from the site if it is windy. Typically, the dust settles within 100 yards of the site, but small dust particles may be carried further in high winds. Dust concentrations become more dispersed as they move further away from the site. Impacts related to dust dispersion from testing are minor.

Aggregate testing operations utilizes heavy machinery such as an excavator and trucks, all of which have internal combustion engines. The combustion of diesel fuel at the site would release GHGs primarily being carbon dioxide (CO₂), nitrous oxide (N₂O) and much smaller concentrations of non-combusted fuel components including methane (CH₄) and other volatile organic compounds (VOCs). DNRC has calculated GHG emissions using the EPA Simplified GHG Calculator version dated June 2024 for the purpose of totaling GHG emissions. This tool totals carbon dioxide (CO₂), nitrous oxide (N₂O), and methane (CH₄) and reports the total as CO₂ equivalent (CO₂e) in metric tons CO₂e. The calculations in this tool are widely accepted to represent reliable calculation approaches for developing a GHG inventory. According to the EPA tool 0.01021 metric tons of CO₂e are emitted for each gallon of diesel fuel burned between trucks and testing equipment, the fuel consumption would be expected to be less than 50 gallons of diesel for all equipment utilized in testing operations. 50 gallons of diesel usage would equate to 0.51 metric tons of CO₂e emitted. This is a negligible amount when compared to the amount of diesel fuel used daily in the State of Montana, the United States or the World. Therefore, the impacts resulting from the burning of diesel fuel needed to complete aggregate testing are negligible.

Secondary Impacts: Both dust and emissions from testing operations may extend beyond the project site. The relation of concentration of either dust or CO₂ is expected to be inverse to the distance from the site. Meaning, that as the distance from the testing site increases, the concentration of dust or CO₂ from project operations will decrease. Concentrations at distances beyond the borders of the immediate testing sites are expected to be low enough that they would either create no or negligible impacts to air quality.

Cumulative Impacts: Overall, Montana has good to great air quality most times of the year. Some seasonal circumstances may degrade air quality, such as wildfire season and the heating of homes in the winter. Aggregate testing activities are not expected to appreciably change cumulative impacts to air quality.

Duration: Impacts to air quality from aggregate testing operations are short-term.

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.

Alternatives

No Action Alternative: Impacts to vegetation cover, quantity and quality would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative

Direct Impacts: During aggregate testing, the vegetation overlying the test area is stripped along with the topsoil and set aside. After the measurements and samples are taken from the test hole, the substrate is put back into the hole and topsoil is spread on top of the disturbance. Vegetation upon where the ground is disturbed from testing dies. However, the organic matter is retained, and the disturbance is seeded with a seed mixture prescribed by the unit office. The disturbance is also monitored for weed introduction and propagation. It is the responsibility of the permittee to mitigate and eliminate weed growth resulting from testing operations. The disturbance is present for approximately 1-2 growing seasons as the site is revegetated. Upon reclamation, the site is expected to return to original productivity. Typically, the total disturbance for up to twenty test holes does not exceed an acre. Travelling from test site to test site in heavy equipment and trucks may temporarily lay down grass, or damage it. These areas would be expected to recover within one growing season. Dependent upon the season, there may be some risk of sparking a wildfire. The permittee should have a fire-extinguisher with them during testing operations. The Department reserves the right to postpone or limit testing to mitigate wildfire risks. Overall, the impacts to vegetation cover, quantity and quality from aggregate testing are minor.

Secondary Impacts: There are no secondary impacts to vegetation cover, quantity, and quality from aggregate testing. All disturbances to vegetation occur within the project area and are therefore direct impacts.

Cumulative Impacts: Noxious and invasive weeds are a significant problem in Montana and considerations should be taken to avoid the spread of these species. Testing operations have the potential to spread and propagate noxious and invasive weeds. However, mitigations such as equipment maintenance and washing can help prevent the introduction or spread of weeds. If the testing site remains undeveloped after testing, it is important to monitor for the introduction of noxious and invasive species.

Duration: Impacts to vegetation cover, quantity and quality are expected to be short-term.

Standard Mitigations:

The following mitigations are proposed as standard mitigations, which means they would be incorporated into all future aggregate testing permits if the action alternative is selected:

- The permittee shall inspect and wash any equipment being utilized in testing prior to commencing work. This shall mitigate the risk of fire and the spread of noxious and invasive weeds.

- The permittee shall be responsible for the elimination of noxious and invasive weeds that are introduced or exacerbated resulting from aggregate testing activities.
- The permittee shall use a seed mix approved by the Department to reclaim the disturbance.
- The permittee shall keep a fire extinguisher readily available during testing operations. A fire start caused by testing operations is the sole responsibility of the permittee.
- The Department may postpone testing operations if they are deemed as a fire risk.

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.

Alternatives

No Action Alternative: Impacts to Terrestrial, Avian and Aquatic Life and Habitats would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative

Direct Impacts: Aggregate testing mostly occurs in rangeland settings but can occur within timbered areas. No trees are cut or damaged by aggregate testing. The impacts to wildlife and their habitat occurs through the removal of some forage and potential cover. However as described within the previous section of this analysis, vegetation typically regrows within one to two seasons.

Temporary visual and audible disturbances may occur to a variety of species in any given testing area. However, these disturbances would be during daylight hours and would be expected to only last up to two days. Wildlife would be expected to return to the testing site several hours to days after testing has been completed. The areas adjacent to the testing area would be expected to be able to temporarily sustain any wildlife impacted by the aggregate testing operations. Impacts to wildlife species and their habitat are expected to be minor.

Secondary Impacts: The wildlife that is temporarily displaced by testing operations would be expected to move to other suitable habitat in the general vicinity of the project. The nearby habitat would be expected to sustain the displaced wildlife species temporarily.

Cumulative Impacts: Typically, aggregate testing occurs close to current human disturbances such as roads, where wildlife has been conditioned to human presence. Due to the short duration of testing operations and the small relative disturbance, testing operations would not be expected to significantly change the current cumulative impacts to wildlife in the testing areas.

Duration: The duration of impacts to wildlife from testing operations would be short-term.

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: Impacts to unique, endangered, fragile or limited environmental resources would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative

Direct Impacts: Testing operations may temporarily disturb unique, endangered, fragile or limited environmental resources. The MMB utilizes the Montana Natural Heritage Map Viewer to determine if any endangered species or species of concern and their habitat overly the project area. This should continue to occur if the action alternative is chosen, and a checklist EA is implemented for future aggregate testing. A checklist item should be created to list all the species of concern in the project area. Any species of concern listed should be evaluated further for the impacts that testing may have on the species.

In 2010 the Montana DNRC implemented a multi-species habitat conservation plan (HCP) to address the potential take of federally listed species on forested state trust lands managed by the Trust Lands Management Division, now Forestry and Trust Lands Division of the Montana DNRC. The HCP was developed to protect five species listed under the Endangered Species Act: grizzly bear, Canada lynx, bull trout, westslope cutthroat trout and interior redband trout. If the action alternative is selected and a checklist EA is implemented for future aggregate testing, one of the items within the checklist should determine whether the testing site is within the project area covered by the HCP. If the testing site is contained within the boundaries of the HCP, further and more detailed evaluation regarding the impacts of testing within the boundary of the HCP shall occur.

Montana contains large areas of Sage Grouse Habitat. Projects that occur in Sage Grouse Habitat must be reviewed by the Montana Sage Grouse Habitat Conservation Program. If the action alternative is selected and a checklist EA is implemented, an item within the checklist should determine whether the testing site is contained within Sage Grouse Habitat.

The Montana DNRC abides by half-mile setbacks from Bald and Golden Eagle nests during nesting season which occurs from February 1 to August 15. If the action alternative is selected and a checklist EA is implemented, an item within the checklist should determine whether the testing site is within one-half mile of an active eagle nest.

Secondary Impacts: Some disturbance may occur to sensitive species or species of concern if they are in the vicinity of testing during the time when testing operations occur. Visual and audible disturbances may cause individuals of these species to seek areas outside of the direct testing area. The habitat and forage in the surrounding areas would be expected to sustain any displaced individuals during testing operations. Upon cessation of testing, the impacted individuals would be expected to return. Overall,

secondary impacts to unique, endangered, fragile or limited environmental species would be expected to be minor.

Cumulative Impacts: Aggregate testing is not a substantive enough action to discernably change cumulative impacts to unique, endangered, fragile, or limited environmental resources.

Duration: The duration of impacts from aggregate testing to unique, endangered limited or fragile environmental resources would be expected to be short-term.

EA Checklist Items

The following checklist items are proposed for the checklist EA review that would occur for each application if the action alternative is selected:

- List any species of concern identified in the proposed testing area through review of the Montana Natural Heritage Program Map. Identify any impacts that aggregate testing would have on each of these species.
- Is the testing area contained within the boundaries of the DNRC Habitat Conservation Plan (HCP)?
 - Yes or No? If yes, further evaluation is required.
- Is the testing area within Core or General Sage Grouse Habitat?
 - Yes or No? If yes, consultation is required through the MT Sage Grouse Habitat Conservation Program and shall be attached to the checklist EA as an appendix.
- Is the testing area within one-half mile of an active Bald or Golden Eagle Nest?
 - Yes or No? If yes, further evaluation is required.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

Alternatives

No Action Alternative: Impacts to historical and archeological sites would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts, Secondary, and Cumulative Impacts: Impacts to historical and archeological sites vary significantly based upon the project's location, which is dissimilar from many of the other resource sections in this document. Aggregate testing does have the potential to disturb historical or archeological sites. If the action alternative is selected and a checklist EA is implemented for future aggregate testing, each permit should continue to be evaluated on a site-by-site basis by the Forestry

and Trust Lands Archeologist through a narrative style analysis. Both the action and no action alternative would evaluate the site in the same way. In all cases, care shall be taken by the permittee to avoid any known archeological or paleontological resources. If the permittee encounters previously unidentified historical or archeological resources, all work shall stop until a professional assessment can be made by the Department.

Duration: Duration of impacts would be evaluated within the checklist EA.

Standard Mitigations

- If any previously unidentified historical, archeological or paleontological resources are encountered during testing, the permittee shall avoid disturbing these resources, shall stop work, and immediately contact the Department's archeologist. Work may only continue after a professional assessment of the site is made by the Department's archeologist.

EA Checklist Items

The following checklist items are proposed for the checklist EA review that would occur for each application if the action alternative is selected.:

HISTORICAL AND ARCHAEOLOGICAL SITES:

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

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.

Alternatives

No Action Alternative: Impacts to aesthetics would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts: Aggregate testing creates minor and temporary disturbances to aesthetics. During testing operations, noise is emitted by testing machinery such as trucks and excavators. The noise created by this equipment is minor and is comparative the noise of normal traffic along a rural Montana Highway. The testing equipment may also be visible to the public from adjacent roads or property. Testing is typically completed over the course of 1-2 days. At the completion of testing, the aesthetics of the site are returned to pre-testing levels. The only difference is the disturbance created where the testing took place. These disturbances will remain visible until they are revegetated by native grass seed, which was explained further in section seven of this document.

Secondary Impacts: Testing disturbances would be visible from areas immediately adjacent to the testing site for up to two growing seasons. After two growing seasons the sites are expected to revegetate and return to pre-testing aesthetics.

Cumulative Impacts: Aggregate testing would not be expected to appreciably change the cumulative impacts to aesthetics in any given testing area.

Duration: The duration of impacts to aesthetics from aggregate testing are short term.

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.

Alternatives

No Action Alternative: Impacts to demand on environmental resources of land, water, air or energy would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts: Aggregate testing does not require the use of limited resources other than fuel utilized to operate the machinery necessary for testing. Fuel is an abundant resource in Montana and can be easily obtained. The impacts to land, water, and air are evaluated in previous sections of this document. The impacts to energy or fuel from aggregate testing are negligible.

Secondary Impacts: Aggregate testing is not expected to have secondary impacts to energy. Impacts to land, water, and air are evaluated in previous sections of this document.

Cumulative Impacts: Aggregate testing may have negligible cumulative impacts to energy resources. As mentioned above, the machinery used in testing requires fuel to operate. Diesel Fuel and gasoline are made from non-renewable resources. However, currently, fuel is abundant and readily available throughout Montana. Aggregate testing does not utilize enough fuel for it to make appreciable changes to cumulative impacts.

Duration: The duration of impacts to energy resources from aggregate testing would be short-term.

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.

Alternatives

No Action Alternative: Impacts to other environmental documents pertinent to the area would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct, Secondary and Cumulative Impacts: Aggregate testing may have some impact upon other studies, plans or projects on the tract. If the action alternative is selected and a checklist EA is implemented to review future testing applications, the checklist EA should contain an item determining whether there are other projects, studies, or plans on the tract. If there are, the author shall determine the impacts (Direct, Secondary, and Cumulative) that aggregate testing will have on the current activities.

Duration: If impacts to other studies, plans or projects are anticipated, then there should be a consideration of the duration of those impacts. If there are no other studies, plans, or projects, the duration would not be applicable.

EA Checklist Items

The following checklist items are proposed for the checklist EA review that would occur for each application if the action alternative is selected.

Are there other studies, plans, or projects currently in place on this tract?

- If yes, please explain the impacts aggregate testing would have.
- No

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.

Alternatives

No Action Alternative: Impacts to human health and safety would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts: Impacts to human health and safety from aggregate testing operations are limited to the occupational safety and health to the employees of the permitted testing company. It is the responsibility of the permittee to follow occupational safety and health guidelines associated with operating heavy machinery. Impacts can be mitigated to minor or negligible for those participating in testing with proper occupational safety and health measures implemented by the permittee.

There are no impacts to human health or safety risks to individuals who are not actively participating in aggregate testing. Exposure levels to noise or any other harmful substances would not meet a threshold of concern for health risks.

Secondary Impacts: There are no secondary impacts to human health and safety that would result from aggregate testing operations.

Cumulative Impacts: There is no change to cumulative impacts to human health and safety that would result from aggregate testing operations.

Duration: The impacts to human health and safety for the employees of the permittee, those conducting the testing, would be short-term and only occur during active testing operations.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

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

Alternatives

No Action Alternative: Impacts to industrial, commercial and agriculture activities would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts: Aggregate testing may have negligible impacts on agricultural activities. The digging of aggregate test holes temporarily disturbs vegetation as described in previous sections of this

document. Typically, test holes are dug in native grass rangeland, but test holes may be dug in fields that are planted with hay or other crops. The disturbances will slightly decrease the available forage for cattle or other livestock grazing. Test hole disturbances are not large enough to significantly impact the availability of forage or damage crops. By law, the State of Montana Trust Lands' surface lessee is entitled to real and actual damages created by testing activities. However, testing activities are typically so minimal that a monetary transfer is not made between the aggregate testing permittee and the surface lessee. Damages shall be negotiated between the testing permittee and the surface lessee, the Department may intervene if a settlement cannot be reached.

Secondary Impacts: Aggregate testing is the first step in determining whether a viable resource is present to mine gravel, rock or sand for commercial and industrial projects. While testing itself has little impact upon industrial or commercial activities, if a viable resource is determined to be present a future mine could have a significant impact upon industrial or commercial activities.

Cumulative Impacts: Aggregate testing does not appreciably change the cumulative impacts to industrial, commercial or agricultural activities.

Duration: The duration of impacts to industrial, commercial and agricultural activities from aggregate testing would be short-term.

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.

Alternatives

No Action Alternative: Impacts to quantity and distribution of employment would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts: Aggregate testing operations do not impact the quantity and distribution of employment.

Secondary Impacts: Aggregate testing operations do not have secondary impacts to the quantity and distribution of employment.

Cumulative Impacts: Aggregate testing is the first step in potentially establishing a gravel mine. The construction industries support many jobs through out Montana. Without new sources of aggregate, the construction industry would cease to exist and so would the jobs it provides. While individual aggregate testing operations would not be expected to have an impact upon quantity and distribution of employment, it is part of an industry that supports many jobs throughout the state.

Duration: No impacts were identified; therefore, duration is not applicable.

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.

Alternatives

No Action Alternative: Impacts to local and state tax bases and revenues would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts: Aggregate testing operations would not have any impact to local and state tax base and revenue.

Secondary Impacts: Aggregate testing operations would not have any secondary impacts to local and state tax base and revenue.

Cumulative Impacts: Aggregate testing operations would not change the cumulative impact to local and state tax base and revenue.

Duration: No impacts were identified; therefore, duration is not applicable.

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.

Alternatives

No Action Alternative: Impacts to demands for government services would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts: Aggregate testing operations would not have any impact to demand for government services.

Secondary Impacts: Aggregate testing operations would not have any secondary impact to demand for government services.

Cumulative Impacts: Aggregate testing operations would not create any change to cumulative impacts to demand for government services.

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.

Alternatives

No Action Alternative: Impacts to demands on locally adopted environmental plans and goals would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts, Secondary and Cumulative Impacts: Aggregate testing operations typically have no impact on locally adopted environmental plans, however if the action alternative is selected and a checklist EA is implemented, an item should be created on the checklist EA to determine whether the proposed site has any locally adopted environmental plans or goals. If the answer is no, there is no need for further analysis. If the answer is yes, further analysis should be conducted.

Duration: Duration is only applicable if impacts occur. Duration shall be analyzed if it is determined that impacts will occur.

EA Checklist Items

The following checklist items are proposed for the checklist EA review that would occur for each application if the action alternative is selected:

- Are there any locally adopted environmental plans and goals for the tracts upon which aggregate testing is proposed?
 - No, no further evaluation is required
 - Yes, evaluate the impacts to these plans or goals that aggregate testing would create.

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.

Alternatives

No Action Alternative: Impacts to access to and quality of recreational and wilderness activities would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts: Aggregate testing does have minor impacts to quality of recreational activities, but has no impact upon activities in wilderness areas, as there are no State of Montana Trust Lands contained

in wilderness areas. Aggregate testing is completed over the course of 1-2 days, during which trucks, excavators, and trailers are present and actively working on trust lands. During active testing periods, aggregate testing may impact the quality of recreation sought by any individual or groups of people looking to recreate on the same lands that are being tested. Testing areas are not closed for recreation during testing activities. After testing is completed, access to and quality of recreation are expected to return to pre-testing conditions. Overall, the impacts to recreation from aggregate testing are minor.

Secondary Impacts: There are no secondary impacts to access to and quality of recreational and wilderness activities from aggregate testing.

Cumulative Impacts: There is no discernible change in cumulative impacts to access to and quality of recreational and wilderness activities from aggregate testing.

Duration: The duration of impacts to access to and quality of recreational and wilderness activities from aggregate testing are short-term.

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.

Alternatives

No Action Alternative: Impacts to density and distribution of population and housing would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts: Aggregate testing has no impact to the density and distribution of population and housing.

Secondary Impacts: There are no secondary impacts to density and distribution of population and housing from aggregate testing.

Cumulative Impacts: There is no discernible change in cumulative impacts to density and distribution of population and housing from aggregate testing.

Duration: No impacts are expected therefore duration is not applicable

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

Alternatives

No Action Alternative: Impacts to social structures and mores would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts: Aggregate testing has no impacts to social structures and mores.

Secondary Impacts: There are no secondary impacts to social structures and mores from aggregate testing.

Cumulative Impacts: There is no discernible change in cumulative impacts to social structures and mores from aggregate testing.

Duration: No impacts are expected therefore duration is not applicable

<p>23. CULTURAL UNIQUENESS AND DIVERSITY: <i>How would the action affect any unique quality of the area?</i></p>

Alternatives

No Action Alternative: Impacts to cultural uniqueness and diversity would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts: Aggregate testing has no impacts to cultural uniqueness and diversity.

Secondary Impacts: There are no secondary impacts to cultural uniqueness and diversity from aggregate testing.

Cumulative Impacts: There is no discernible change in cumulative impacts to cultural uniqueness and diversity from aggregate testing.

Duration: No impacts are expected therefore duration is not applicable

<p>24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES: <i>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.</i></p>

Alternatives

No Action Alternative: Impacts to other appropriate social and economic circumstances would continue to be evaluated on a site-by-site basis through a narrative EA.

Action Alternative:

Direct Impacts: Each aggregate test permit generates a 25-dollar application fee.

Secondary Impacts: Aggregate testing can lead to future development of aggregate resources. This could lead to significant future royalties for the trust beneficiaries.

Cumulative Impacts: There is no discernible change in cumulative impacts to social and economic circumstances from aggregate testing.

Duration: Aggregate application fees are distributable, so the duration of economic impacts to the Trust Beneficiaries are short-term.

Programmatic EA Prepared By:	Name: Zack Winfield Title: Petroleum Engineer	Date: 1/6/2025
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V. FINDING

25. ALTERNATIVE SELECTED:


After a thorough review of the Environmental Analysis, the applicable rules and statutes related to programmatic environmental reviews, aggregate testing, and the management and mission of State of Montana school trust lands; I have decided to select the action alternative and the MMB will adopt the programmatic EA for the next ten years. This decision is consistent with the mission of State of Montana School Trust Lands and will protect the future income generating capacity of the land.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

I have concluded that through the adoption of the standard stipulations and the checklist EA that all impacts will either be addressed through the checklist or reduced to insignificant by the adoption of stipulations.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS More Detailed EA No Further Analysis

Programmatic EA Approved By:	Name: TREVOR TAYLOR
	Title: MINERALS MANAGEMENT BUREAU CHIEF, FTLO - DNRC
Signature: 	Date: 1/6/25

Appendix A: List of Standard stipulations for future aggregate testing permits, if action alternative is selected.

1. The permittee shall only conduct testing operations under dry or frozen conditions. Testing under wet or muddy conditions is not allowed under this permit.
2. No testing shall occur in areas where the slope is steeper than 4:1.
3. The permittee shall abide by a 100-foot buffer from all surface water including wetlands.
4. The permittee shall inspect and wash any equipment being utilized in testing prior to commencing work. This shall mitigate the risk of fire and the spread of noxious and invasive weeds.
5. The permittee shall be responsible for the elimination of noxious and invasive weeds that are introduced or exacerbated resulting from aggregate testing activities.
6. The permittee shall only spread a native, weed-free seed mix on the disturbance. The mixture must be approved by the unit office prior to the spreading of seed.
7. The permittee shall keep a fire extinguisher readily available during testing operations. A fire start caused by testing operations is the sole responsibility of the permittee.
8. The Department may postpone testing operations if they are deemed as a fire risk.
9. If any previously unidentified historical, archeological or paleontological resources are encountered during testing, the permittee shall avoid disturbing these resources, shall stop work, and immediately contact the Department's archeologist. Work may only continue after a professional assessment of the site is made by the Department's archeologist.

APPENDIX B: EA Checklist Analysis document if action alternative is selected:

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:
Proposed Implementation Date:
Proponent:
Location:
County:
Trust:

Introduction: In December of 2024, the Minerals Management Bureau of the Forestry and Trust Lands Division of the Montana DNRC, completed a programmatic environmental analysis for aggregate testing. The programmatic environmental analysis goes into further detail and evaluates a wider scope of resources than this checklist environmental assessment. This checklist environmental assessment should be read and understood in conjunction with the programmatic environmental analysis. The programmatic environmental assessment can be found on the Departments website at: [HYPERLINK](#)

I. TYPE AND PURPOSE OF ACTION

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:
Provide a brief chronology of the scoping and ongoing involvement for this project.

3. ALTERNATIVES CONSIDERED:

No Action Alternative: The aggregate testing permit application would be denied.

Action Alternative: The aggregate testing permit application would be approved with standard stipulations along with any special stipulations identified resulting from this analysis.

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Will the project impact any unique geologic features?

Yes, further evaluation is required.

No.

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

List any species of concern identified in the proposed testing area through review of the Montana Natural Heritage Program Map. Identify any impacts that aggregate testing would have on each of these species.

Is the testing area contained within the boundaries of the DNRC Habitat Conservation Plan (HCP)?

Yes, further evaluation is required.

No.

Is the testing area within Core or General Sage Grouse Habitat?

Yes, consultation is required through the MT Sage Grouse Habitat Conservation Program.

No.

Is the testing area within one-half mile of an active Bald or Golden Eagle Nest?

Yes, further evaluation is required.

No.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

The DNRC Archeologist shall be consulted for impacts to historical and archeological sites.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

Are there other studies, plans, or projects currently in place on this tract?

Yes, further evaluation is required.

No.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

Are there any locally adopted environmental plans and goals for the tracts upon which aggregate testing is proposed?

Yes, evaluate the impacts to these plans or goals that aggregate testing would create.

No.

Checklist EA Prepared By:	Name: Title:	Date:
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Checklist EA Approved By:	Name: Title:	
Signature:		Date:

