DRAFT - CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	DSL Temporary Asphalt Plant Request
Proposed Implementation Date:	Spring 2024
Proponent:	AM Welles, Inc PO Box 2808 Norris MT, 59745
Location:	T5S – R1W – Section 16 W2SE4
County:	Madison

I. TYPE AND PURPOSE OF ACTION

AM Welles in conjunction with Riverside Contracting henceforth referred to as the proponent(s), have requested to locate and operate a temporary asphalt plant within the boundaries of the DSL gravel pit, Opencut #674. The request is to mobilize the asphalt plant to the site on or after April 1, 2024 and demobilize the plant on or before June 8, 2024. The plant would create asphalt to complete a repaving job along MT HWY 287 between Ennis and Viginia City. The plant would be expected to operate intermittently during the overall proposed time. The plant operator would be Riverside Contracting of Missoula, Montana. It is customary for contractors to share resources to complete infrastructure projects around Montana. The request is consistent with the Montana DNRC's aggregate take and remove permit G-1273-94 which states, "The use of an asphalt plant will be requested by the permittee and approved or denied by the department on a written case-by-case basis." This review will analyze the impacts of the alternatives given in section 3 of this document. This review will not contemplate the impacts of other mining activities outside of the operation of the asphalt plant. Those impacts were previously evaluated in an assessment completed by the Department in May of 2023 for the expansion of the DSL pit. That analysis can be read here: https://dnrc.mt.gov/_docs/environmental-documents/minerals/05-23-23_Final-EA-Ennis-DSL-Pit.pdf

The proponent has obtained a DEQ Opencut Mining standard permit from the Montana Department of Environmental Quality's Opencut Mining Section. This permit allows for the operation of an asphalt plant within the boundaries of the permitted area, along with other mining and related activities. The DEQ's environmental analysis and their permit can be found on their website.

II. PROJECT DEVELOPMENT

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

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

A request to locate and operate a temporary asphalt plant within the boundaries of the DSL pit, was received by the Department on November 1, 2023. Initial proposal scoping notice letters were sent to landowners within one-half mile of the project, as well as the Department's surface lessee. The same letter was sent to the Department's email list compiled from commentors on the previous expansion of the pit. A press release was issued in the Madisonian (Ennis, MT) January 25, 2024. In that same edition, a legal notice was also issued. Finally, the same legal notice was issued one week later in the February 1, 2024 edition of the Madisonian. All documents are on file and can be requested by the public.

A 30-day initial scoping public comment period was opened on February 1, 2024 and closed on March 2, 2024. Comments were collected via US mail, and Microsoft forms (digitally). Scoping comment will be included in the final analysis as Appendix A, which is incorporated herein by reference. Each comment was read and analyzed to develop the resource issues and concerns within each section. The Department will respond categorically to the issues and concerns raised in these comments in its final document.

Through internal and external scoping, the project development team identified the most prevalent resource issues and concerns which are listed at the beginning of each resource section within this document. If there are no issues and concerns listed, none were identified for that resource.

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

To locate and operate an asphalt plant within this specific site, the proponent must obtain and maintain the following:

- Authorization letter for temporary asphalt plant – Montana DNRC – Trust Lands Management Division (MMB)
- Any water used in the process must have a permitted water right from the DNRC WRD
- Opencut Mining Permit 674 – Montana DEQ Opencut Section
- With respect to air and water quality the proponent must comply with all federal regulations set forth by the Environmental Protection Agency (EPA) and state regulations set forth by the Montana Department of Environmental Quality (DEQ).
- An asphalt plant requires a DEQ Air Quality Bureau permit.

3. ALTERNATIVES CONSIDERED:

***No Action Alternative*:** The request to operate a temporary asphalt plant within the boundaries of the DSL pit would be denied via a denial letter. If this alternative is selected, Riverside Contracting has communicated to the Department that they would utilize an alternate location for the asphalt plant near Alder, Montana which is approximately 26 miles from the DSL pit. The Alder site is not owned by State of Montana Trust Lands. Under this scenario, gravel would be hauled from the DSL pit, through the repaving project area in which the asphalt is needed, to the Alder site and stockpiled. It would then be made into asphalt via the asphalt plant, hauled back towards the project and the DSL pit, then utilized for the paving job. It should be noted that if the no action alternative is selected, impacts to the environment at the DSL site as it relates to an asphalt plant are expected to be negligible or none.

***Action Alternative*:** The request to operate a temporary asphalt within the boundaries of the DSL pit would be authorized via an authorization letter. If this alternative is selected, the proponent or Riverside Contracting would be allowed to locate and operate an asphalt plant within the boundaries of the DSL pit for the requested period of April 1, 2024, to June 8, 2024. It shall be noted that if the action alternative is selected, impacts to the environment at the Alder site are expected to be negligible or none.

SUMMARY OF POTENTIAL IMPACTS TO THE PHYSICAL AND HUMAN ENVIRONMENT

The impacts analysis identifies and evaluates direct, secondary, and cumulative impacts.

• **Direct impacts**: impacts that occur at the same time and place as the action that causes the impact

• **Secondary impacts**: further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action.

• **Cumulative impacts**: collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact study evaluation, or permit processing procedures.

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

<u>The duration of an impact is quantified as follows:</u>
• **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.

Issues and Concerns:

- The operation of an asphalt plant will be detrimental to soils.

Current conditions:

Geology: No unique or unusual geologic features are present within the DSL pit. If the action alternative is selected the asphalt plant would be stationed on the DSL pit floor which is comprised of compacted gravel. The gravel deposit is alluvial terrace in nature and is situated within a large bench west of the Madison River.

The Department is unaware of the nature of geology at the Alder site.

Soils: All topsoil within the DSL pit operating area has been stripped, stockpiled, and saved for mining reclamation. The area of the proposed asphalt plant location does not contain any soils, rather it is compacted gravel that is on the pit floor. The pit floor is underlain with multiple layers of clay, sand, and silt.

The Department has been informed by Riverside Contracting that the Alder site is also stripped of topsoil.

Alternatives

***No Action Alternative*:**

Direct Impacts: The selection of the no action alternative would place the asphalt plant at the Alder site. Riverside informed the Department that the site at Alder has been stripped of topsoil. No impacts to geology and soil quality, stability and moisture are expected to occur from the selection of the no action alternative.

Secondary Impacts: The selection of the no action alternative is not expected to have any secondary impacts on geology and soil quality, stability, and moisture.

Cumulative Impacts: The selection of the no action alternative is not expected to change the cumulative impacts to geology, soil quality, stability, and moisture.

Duration: No impacts were identified from the selection of the no action alternative. Therefore, duration is not applicable.

***Action Alternative*:**

Direct Impacts: No impacts to geology and soil quality, stability and moisture would be expected from the selection of the action alternative. This is because soils in the area in which the asphalt plant would be located, have already been stripped and stockpiled for gravel mining purposes.

Secondary Impacts: There are no secondary impacts expected to geology and soil quality, stability and moisture from the selection of the action alternative.

Cumulative Impacts: There are no cumulative impacts expected to geology and soil quality, stability and moisture from the selection of the action alternative.

Duration: No impacts were identified from the selection of the action alternative. Therefore, the duration of impacts is not applicable.

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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.

Issues and Concerns

- Contaminants from the asphalt plant may escape containment and seep into the groundwater or run off into surface water nearby, therefore impacting the resource.
- The asphalt plant will consume groundwater.

Current Conditions

Surface Water: Section 16 contains an irrigation ditch that draws water from Moore Creek. Moore Creek is a tributary of the Madison River and ultimately drains into Fletcher Channel and then Ennis Lake. Moore Creek is located east of this irrigation ditch and flows mostly parallel to Fletcher Canal prior to their confluence just south of Ennis Lake. Ennis lake and the main channel of the Madison River are approximately 1.5 miles from the DSL pit. The irrigation ditch most near the project flows through what appears to be a series of detention basins prior to entering Ennis Lake.

Alder, MT is located near the Ruby River, which flows into the Beaverhead River just upstream of the Beaverhead's confluence with the Big Hole River. The confluence of the Beaverhead and the Big Hole, form the Jefferson River which is one of the "Three Forks" that form the headwaters of the Missouri River.

Ground Water: A search of the Montana Ground Water Information Center's website yields 3 groundwater wells directly adjacent to the DSL site. Two of the wells, on the south side of the pit, are statewide monitoring network wells. Figures 1 and 2 show the variance in depth to ground water overtime for these wells compared to ground surface. Additionally, a well was completed by Valley Garden Land and Cattle (325450) in January 2023 just north of the pit boundary, this well reports a static water level of 41 feet below ground surface. Figure 3 shows the wells' spatial relation to the DSL pit. From lidar data published by the Montana State Library, the surface elevation of the groundwater wells was estimated. By subtracting the minimum depth to water from the elevation, we can obtain a maximum calculated elevation of groundwater. The average maximum calculated elevation of groundwater from the three wells listed above is 4874.33 ft asl (above sea level). The lowest elevation within the pit area according to Montana State Library lidar is 4914 ft asl. It is therefore estimated that the pit floor and ground water table are separated by approximately 40 ft. Additionally, all three of the GWIC wells' logs report interlaid sands and clays that are immediately beneath the pit floor.

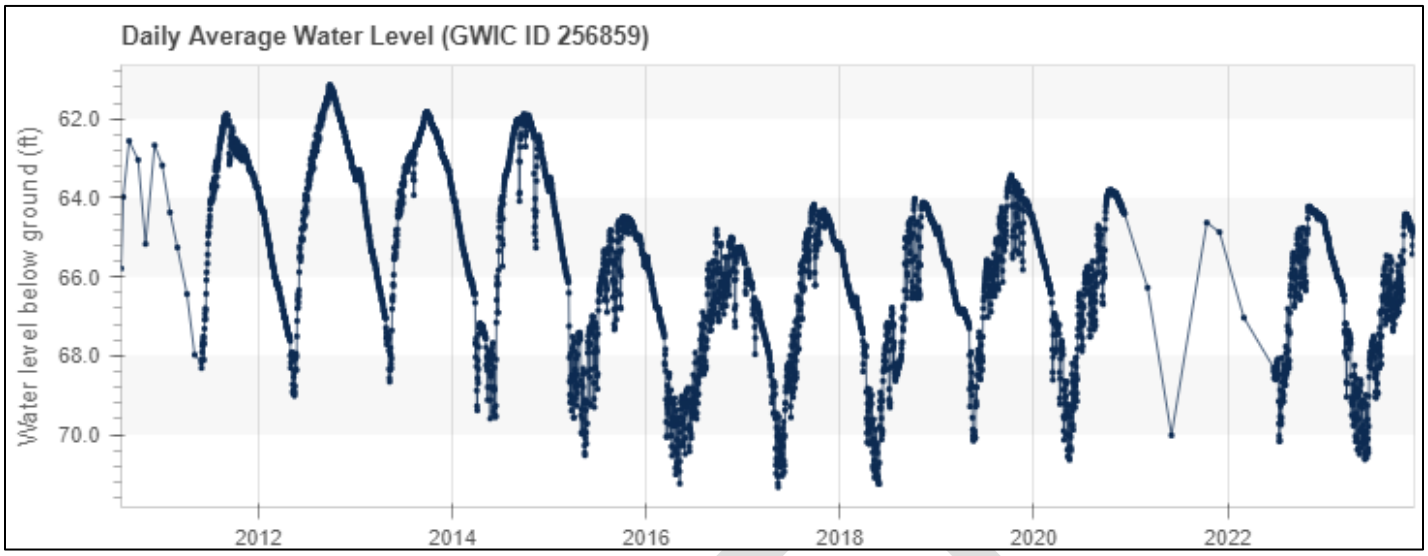

Figure 1: Variance in water level below ground surface over time. GWIC Well 256859

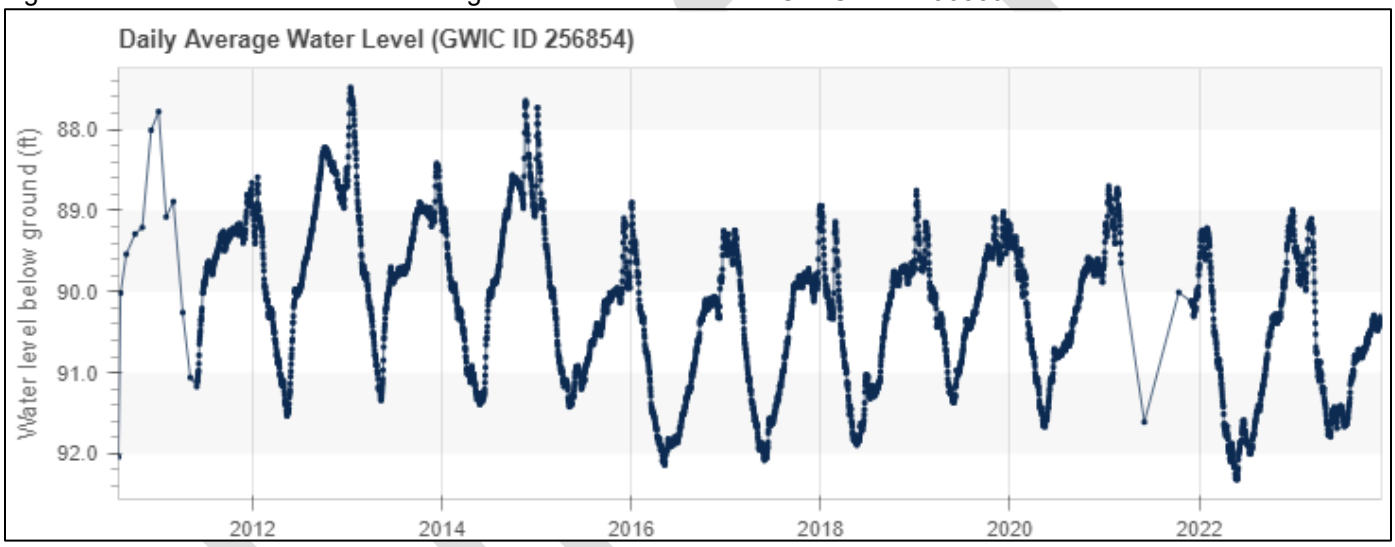

Figure 2: Variance in water level below ground surface over time. GWIC Well 256854

Figure 3: Spatial Relation of Gwic Wells to DSL Pit

The Department is unaware of the nature of the groundwater near the Alder Site.

Alternatives

***No Action Alternative*:**

Direct Impacts: There would be no direct impacts to water quality, quantity or distribution near the DSL site from the selection of the no action alternative. Without knowing the nature of the site at Alder, it is difficult for the DNRC to determine whether impacts may or may not occur at this site. The mobile asphalt plant that would be utilized for this project consists of several trailers that combine to form a closed loop, drum style system, in which byproducts enter and asphalt exits. Some aggregate fines are discharged from the baghouse on the plant, most of which are recycled back into the plant. The aggregate fines that are not recycled back into the plant, are typically spread on the pit floor, and recycled in mining operations. The fines consist of the same components of the gravel and do not contain chemicals or toxins. The plant utilizes propane for burner fuel and a diesel generator for power. The plant also uses some amounts of water for the creation of asphalt. The Department is unaware of the water rights or usage at the Alder site. Since the plant is a closed loop system, it is not anticipated to have significant impacts upon water quality, quantity, or distribution in the Alder area. If a spill of asphalt binder or any other chemical occurs, the proponent should report and clean the incident in accordance with applicable MT DEQ and EPA laws. Overall, without knowing the specific information regarding water at the Alder site, the DNRC is not able to make an accurate assessment on the impacts to water at the site.

Secondary Impacts: Secondary impacts to water quality, quantity and distribution are not expected to occur at the Alder site.

Cumulative Impacts: The selection of the no action alternative would utilize water in the operation of the asphalt plant. The Department is unaware of the nature of water rights or usage at the Alder site. The usage of water in the asphalt plant would not be expected to have appreciable changes to cumulative impacts on water.

Duration: Impacts from the selection of the action alternative are expected to be short-term.

Action Alternative:

Direct Impacts: The mobile asphalt plant that would be utilized for this project consists of several trailers that combine to form a closed loop, drum style system, in which byproducts enter, and asphalt exits. Some aggregate fines are discharged from the baghouse on the plant, most of which are recycled back into the plant. The aggregate fines that are not recycled back into the plant, are typically spread on the pit floor, and recycled in mining operations. The fines consist of the same components of the gravel and do not contain chemicals or toxins. The plant utilizes propane for burner fuel and a diesel generator for power. The plant uses some amounts of water for the creation of asphalt. AM Welles is authorized to utilize water via an exempt water well at the DSL pit. AM Welles shall abide by the terms and quantities of their water right, issued by the DNRC Water Rights Division. DNRC Trust Lands has no authority over the amount of water utilized from the ground water well. Since the plant is a closed loop system, it is not anticipated that it will have significant impacts upon water quality, quantity, or distribution in the project area. If a spill of binder, diesel or any other chemical occurs, the proponent shall report and clean the incident in accordance with applicable MT DEQ and EPA laws. A spill would not be expected to infiltrate to the ground water table due to the clay layers present between the pit floor and the groundwater aquifer. The berms surrounding the DSL pit are expected to contain any contaminants that may be leaked, from exiting the pit during surface runoff events. If somehow, in the unlikely event that any chemical was to escape the boundaries of the pit, it would be expected to settle in the lowland bench area immediately east of the pit boundaries, it would not be expected to reach the irrigation ditch, Moore Creek, the Madison River, or Ennis Lake. If a spill prevention, control, and countermeasure plan is required by law, the proponent shall abide by the requirement. Overall, there are no impacts to water quality expected, impacts to quantity and distribution are expected to be minor and occur from the usage of water in the project operations.

Secondary Impacts: There are no secondary impacts expected to water quality, quantity, or distribution resulting from the selection of the action alternative.

Cumulative Impacts: The selection of the action alternative would utilize water in the operation of the asphalt plant. AM Welles has a permitted exempt water right from the DNRC's Water Rights Division and the usage of the water in the plant is not expected to appreciably change the cumulative impacts to water in the area.

Duration: Impacts from the selection of the action alternative are expected to be short-term.

Mitigations

The potential selection of the action alternative would include the following stipulations in the authorization letter.

- The asphalt plant must be regularly maintained and inspected to ensure it is not leaking fluids.
- If a spill of any hazardous liquid occurs, the permittee must report the incident in accordance with applicable MT DEQ and EPA laws.
- Any plans or regulations required by law regarding spill prevention and control, or water quality protection must be followed.

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.

Issues and Concerns

- Emissions from the asphalt will pollute the air with greenhouse gasses.
- Emissions from the trucking will pollute the air with greenhouse gasses.
- Emissions from the asphalt plant contain carcinogenic toxins that impact human health and wildlife health.
- Dust would be created from asphalt plant operations.

Current Conditions

Currently the emissions sources that impact air quality in the area are dust particulates created from gravel mining operations, agriculture activities, and vehicle travel on gravel roads. Additionally, local vehicle traffic, home heating, and industrial and agricultural activities emit greenhouse gasses to the atmosphere. Seasonally, wildfires may have a significant impact upon air quality in the area.

Alternatives

No Action Alternative:

Direct Impacts: The selection of the no action alternative would locate the asphalt plant near Alder, Montana. Asphalt plant emissions are expected to be the same in both the action alternative and no action alternative. To create enough asphalt to complete the road project, Riverside Contracting estimates 41,895 gallons of propane will be used as burner fuel, and 5,500 gallons of diesel fuel will be used to power the generator.

Carbon Dioxide is the principal greenhouse gas (GHG) created from the burning of diesel and propane. Other GHG's such as methane, nitrous oxides, and fluorinated compounds are also emitted. The US Energy Information Administration shows that one gallon of propane creates 12.68 pounds of carbon dioxide emissions. To create the asphalt needed to complete the road project, the required volume of 41,895 gallons of propane would be expected to create 531,229 pounds of carbon dioxide. Also, according to the US Energy Information Administration and the EPA, Diesel fuel creates 22.45 pounds of carbon dioxide per gallon of fuel. Therefore, the creation of the necessary asphalt would create 123,475 pounds of carbon dioxide from the burning of diesel fuel. Combined, the burning of diesel and propane for asphalt generation is equal to 654,704 pounds or 297 metric tons of carbon dioxide.

The no action alternative would be expected to utilize 28,895 gallons of diesel fuel for trucking. Again utilizing a coefficient of 22.45 pounds of carbon dioxide per gallon of diesel fuel burned, it is expected that the no action alternative will create 648,693 pounds or 294 metric tons of carbon dioxide from trucking.

In total, the no action alternative would be expected to emit 591 metric tons of carbon dioxide According to the US Energy Information Center, it was estimated that Montana emitted 28.5 million metric tons of energy-related carbon dioxide in 2021.

According to the Montana DEQ, asphalt plants produce particulate matter (PM), oxides of nitrogen (NOx) and carbon monoxide, which are regulated by the DEQ and the EPA. Any other toxins or chemicals released from asphalt plant emissions would also be regulated by these agencies.

Every asphalt plant in Montana must be registered with the Montana DEQ and the operator must notify DEQ of any proposed new location 15 days prior to production. Asphalt plants must follow the rules and regulations set forth by Montana DEQ Air Quality Bureau and the Environmental Protection Agency.

Dust generation created from loading, hauling and dumping of aggregate would be expected to be greater in the no action alternative when compared to the action alternative. In the action alternative, the aggregate would be taken directly from the DSL pit, loaded into the asphalt plant onsite and then sent to the project to be utilized. In contrast, the no action alternative would require aggregate to be loaded into trucks which would then have to be hauled approximately 26 miles to Alder and stockpiled onsite. The stockpiled aggregate would then be loaded into the asphalt plant and asphalt would be generated and sent back to the project area to be utilized.

Overall, the impacts to air quality from the selection of the no action alternative are expected to be minor.

Secondary Impacts: There are no secondary impacts expected to air quality from the selection of the no action alternative.

Cumulative Impacts: The 591 metric tons of carbon dioxide that would be expected to be produced from the selection of the no action alternative, would enter the atmosphere, and disperse among the current components of the atmosphere. The addition of 591 metric tons of carbon dioxide would not be expected to significantly impact air quality at a local, statewide, national, or global level. Cumulative impacts from the selection of the no action alternative are expected to be minor.

Duration: Impacts to air quality resulting from the selection of the no action alternative would be expected to be short-term.

Action Alternative:

Direct Impacts: The selection of the action alternative would locate the asphalt plant in the DSL pit. Asphalt plant emissions are expected to be the same in both the action alternative and no action alternative. To create enough asphalt to complete the road project, Riverside Contracting estimates 41,895 gallons of propane will be used as burner fuel, and 5,500 gallons of diesel fuel will be used to power the generator.

Carbon Dioxide is the principle GHG created from the burning of diesel and propane. Other GHG's such as methane, nitrous oxides, and fluorinated compounds are also emitted. The US Energy Information Administration shows that one gallon of propane creates 12.68 pounds of carbon dioxide emissions. To create the asphalt needed to complete the road project, the required volume of 41,895 gallons of propane would be expected to create 531,229 pounds of carbon dioxide. Also according to the US Energy Information Administration, Diesel fuel creates 22.45 pounds of carbon dioxide per gallon of fuel. Therefore, the creation of the necessary asphalt would create 123,475 pounds of carbon dioxide from the burning of diesel fuel. Combined, the burning of diesel and propane for asphalt generation is equal to 654,704 pounds or 297 metric tons of carbon dioxide.

The action alternative would be expected to utilize 12,614 gallons of diesel fuel for trucking. Again, utilizing a coefficient of 22.45 pounds of carbon dioxide per gallon of diesel fuel burned, it is expected that the no action alternative will create 283,184 pounds or 128 metric tons of carbon dioxide from trucking.

In total, the action alternative would be expected to emit 425 metric tons of carbon dioxide. For comparison, it was estimated that Montana emitted 28.5 million metric tons of energy-related carbon dioxide in 2021.

According to the Montana DEQ, asphalt plants produce particulate matter (PM), oxides of nitrogen (NOx) and carbon monoxide, which are regulated by the DEQ and the EPA. Any other toxins or chemicals released from asphalt plant emissions would also be regulated by these agencies.

Every asphalt plant in Montana must be registered with the Montana DEQ and the operator must notify DEQ of any proposed new location 15 days prior to production. Asphalt plants must follow the rules and regulations set forth by Montana DEQ Air Quality and the EPA.

Dust generation created from loading, hauling and dumping of aggregate would be expected to be greater in the no action alternative when compared to the action alternative. In the action alternative, the aggregate would be taken directly from the DSL pit, loaded into the asphalt plant onsite and then sent to the project to be utilized. In contrast, the no action alternative would require aggregate to be loaded into trucks which would then have to be hauled approximately 26 miles to Alder and stockpiled onsite. The stockpiled aggregate would then be loaded into the asphalt plant and asphalt would be generated and sent back to the project area to be utilized.

Overall, the impacts to air quality from the selection of the action alternative are also expected to be minor, but less than those expected from the selection of the no action alternative.

Secondary Impacts: There are no secondary impacts to air quality expected from the selection of the action alternative.

Cumulative Impacts: The 425 metric tons of carbon dioxide that would be expected to be produced from the selection of the action alternative, would enter the atmosphere and disperse among the current components of the atmosphere. The addition of 425 metric tons of carbon dioxide would not be expected to significantly impact air quality at a local, statewide, national or global level. Cumulative impacts from the selection of the no action alternative are expected to be minor.

Duration: Impacts to air quality from the selection of the action alternative would be expected to be short-term.

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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.

Issues and Concerns

- The operation of an asphalt plant will negatively impact flora in the area.

Current Conditions

The DSL site and the Alder site have already been stripped of topsoil and vegetation.

Alternatives

***No Action Alternative*:**

Direct Impacts: Riverside Contracting informed the Department that the site at Alder has already been stripped of vegetation and topsoil. The selection of the no action alternative is not expected to have any direct impacts upon vegetation cover, quantity, and quality.

Secondary Impacts: The selection of the no action alterative would not be expected to have any secondary impacts upon vegetation cover, quantity, and quality.

Cumulative Impacts: The selection of the no action alternative would not be expected to change cumulative impacts upon vegetation cover, quantity, and quality.

Duration: No impacts have been identified from the selection of the no action alternative. Therefore, the duration of impacts in not applicable for this resource section.

***Action Alternative*:**

Direct Impacts: The action alternative would locate the asphalt plant within the DSL site. Vegetation and topsoil at the DSL site have already been stripped and stockpiled for reclamation. No further stripping of vegetation or soil would be required from the selection of the action alternative. No direct impacts are expected to result from the selection of the action alternative.

Secondary Impacts: The selection of the action alternative would not be expected to have any secondary impacts upon vegetation cover, quantity, and quality.

Cumulative Impacts: The selection of the action alternative would not be expected to change cumulative impacts upon vegetation cover, quantity and quality.

Duration: No impacts have been identified from the selection of the no action alternative. Therefore, the duration of impacts in not applicable for this resource section.

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.

Issues and Concerns

- An asphalt plant will disturb wildlife.
- An asphalt plant will impact wildlife's ability to effectively reproduce.

Current Conditions

The general area surrounding the DSL pit provides habitat for a variety of wildlife species. Deer, elk, moose, and antelope all inhabit the Madison valley. Migratory, predatory and songbird species all inhabit the Madison Valley and may be in the project vicinity. Approximately 1.5 miles east of the DSL pit, is the main channel of the Madison River which runs into Ennis Lake. The lake, river, and tributaries contain multiple species of trout, artic grayling, and other fish species. They also provide habitat for amphibians and reptiles such as snakes and frogs. Other species that may be present in the area include foxes, coyotes, wolves, badgers, and other burrowing species such as mice and gopher.

Species at the Alder site would be expected to be similar to those listed above.

Alternatives

***No Action Alternative*:**

Direct Impacts: The no action alternative would locate the asphalt plant near Alder. Some exhaust and odor would be emitted from the plant, which could temporarily alter animal travel routes and land use near the plant. However due to the short-term nature of the proposed project, these emissions are not expected to permanently impact any wildlife species or their habitats in the area. No impacts to fish or aquatic species are expected to occur from the selection of the no action alternative.

The Department does not make any assertion to the accuracy of comments received regarding asphalt plant emissions impacting the reproductive success of animals. The Montana DEQ and the Environmental Protection Agency regulate the allowable emissions from an asphalt plant. The DNRC Forestry and Trust Lands Division is non-regulatory and does not have the ability to "shutdown" an asphalt plant. This analysis contemplates whether the asphalt plant will be in the DSL pit or somewhere else (in this case near Alder). Based upon the selected alternative, either animals near the DSL site or the Alder site may experience minor impacts.

The additional trucking miles that would be included in the selection of the no action alternative would increase the potential for vehicular-wildlife collisions along the haul route when compared to the action alternative.

Overall, the direct impacts of the no action alternative to terrestrial, avian and aquatic life and habitats in the area would be expected to be minor.

Secondary Impacts: The selection of the no action alternative would not be expected to have any secondary impacts on terrestrial, avian and aquatic life and habitats.

Cumulative Impacts: Human disturbances such as highways, roads, houses, agricultural and industrial activities all impact wildlife species in the Alder area. The additional impacts introduced from the selection of the no action alternative would not be expected to significantly alter the impacts to wildlife that are currently present in the area.

Duration: The impacts of the selection of the no action alternative are expected to be short-term.

***Action Alternative*:**

Direct Impacts: Terrestrial, avian and aquatic life and habitats near the DSL pit may be impacted by the selection of the action alternative. Some exhaust and odor would be emitted from the plant, which could temporarily alter animal travel routes and land use near the plant. However, due to the short-term nature of the proposed project, these emissions would not be expected to permanently impact any wildlife species or habitats in the area. No impacts to fish or aquatic species are expected to occur from the selection of the action alternative.

The Department does not make any assertion to the accuracy of comments received regarding asphalt plant emissions impacting the reproductive success of animals. The Montana DEQ and the Environmental Protection Agency regulate the allowable emissions from an asphalt plant. The DNRC Forestry and Trust Lands Division is non-regulatory and does not have the ability to "shutdown" an asphalt plant. This analysis contemplates whether the asphalt plant will be in the DSL pit or somewhere else (in this case near Alder). Based upon the selected alternative, either animals near the DSL site or the Alder site may experience minor impacts.

The additional trucking miles that would be included in the selection of the no action alternative would increase the potential for vehicular-wildlife collisions along the haul route when compared to the action alternative.

Overall, the direct impacts of the action alternative to terrestrial, avian and aquatic life would be expected to be minor. The selection of the action alternative would be expected to have lesser impacts on terrestrial, avian and aquatic life than the no action alternative.

Secondary Impacts: The selection of the action alternative would not be expected to have any secondary impacts on terrestrial, avian and aquatic life and habitats.

Cumulative Impacts: Human disturbances such as highways, roads, houses, agricultural and industrial activities all impact wildlife species in the greater Madison Valley. The additional impacts introduced from the selection of the action alternative would not be expected to significantly alter the impacts to wildlife that are currently present in the area.

Duration: The impacts of the selection of the action alternative are expected to be short-term.

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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.

Issues and Concerns

- The Madison Valley provides habitat for sensitive species and species of concern. The impacts of an asphalt plant would be detrimental to these species.

Current Conditions

An inventory of the Montana Natural Heritage Program's animal Species of Concern database was conducted for the DSL area. The project area yielded no observations for species of concern. However, there were observations within the project vicinity. Observations in the project area vicinity included: wolverine, artic grayling, Ferruginous Hawk, long-billed curlew, American White Pelican, and Great Blue Heron. Other sensitive species or species of concern may also be in the area.

Within the general vicinity of Alder, MT there were species point observations for American White Pelican, Brewer's Sparrow, Cassin's Finch, Common loon, Golden Eagle, Great Blue Heron, and White-faced Ibis. Other sensitive species or species of concern may also be in the area.

Alternatives

***No Action Alternative*:**

Direct Impacts: The no action alternative would locate the asphalt plant near Alder. Some exhaust and odor would be emitted from the asphalt plant, which could temporarily alter individuals of species of concern travel routes and land use near the plant. However, these emissions are not expected to significantly impact any species of concern or their habitats in the area due to the short-term nature of the project.

The Department does not make any assertion to the accuracy of comments received regarding asphalt plant emissions impacting the reproductive success of animals. The Montana DEQ and the Environmental Protection Agency regulate the allowable emissions from an asphalt plant. The DNRC Forestry and Trust Lands Division is non-regulatory and does not have the ability to “shutdown” an asphalt plant. This analysis contemplates whether the asphalt plant will be in the DSL pit or somewhere else (in this case near Alder). Based upon the selected alternative, either animals near the DSL site or the Alder site may experience minor impacts.

The additional trucking miles that would be included in the selection of the no action alternative would increase the potential for vehicular-wildlife collisions that may include sensitive species or species of concern along the haul route when compared to the action alternative.

Overall, the direct impacts of the no action alternative to unique, endangered, fragile or limited environmental resources in the area would be expected to be minor.

Secondary Impacts: The selection of the no action alternative would not be expected to have any secondary impacts on unique, endangered, fragile or limited environmental resources.

Cumulative Impacts Human disturbances such as highways, roads, houses, agricultural and industrial activities all impact wildlife species in the greater Madison Valley. The additional impacts introduced from the selection of the no action alternative would be expected to be negligible. The additional impacts would not be expected to appreciably change current impacts upon unique, endangered, fragile or limited environmental resources.

Duration: The impacts of the selection of the no action alternative are expected to be short-term.

Action Alternative:

Direct Impacts: Some exhaust and odor would be emitted from the asphalt plant, which could temporarily alter individuals of species of concern travel routes and land use near the plant. However, these emissions are not expected to significantly impact any species of concern or their habitats in the area due to the short-term nature of the project. The placement of the asphalt plant in the DSL pit would be expected to have no impacts upon wetlands.

The Department does not make any assertion to the accuracy of comments received regarding asphalt plant emissions impacting the reproductive success of animals. The Montana DEQ and the Environmental Protection Agency regulate the allowable emissions from an asphalt plant. The DNRC Forestry and Trust Lands Division is non-regulatory and does not have the ability to “shutdown” an asphalt plant. This analysis contemplates whether the asphalt plant will be in the DSL pit or somewhere else (in this case near Alder). Based upon the selected alternative, either animals near the DSL site or the Alder site may experience minor impacts.

The additional trucking miles that would be included in the selection of the no action alternative would increase the potential for vehicular-wildlife collisions that may include sensitive species or species of concern along the haul route when compared to the action alternative.

Overall, the direct impacts of the action alternative to unique, endangered, fragile or limited environmental resources in the area would be expected to be minor and less than those of the no action alternative.

Secondary Impacts: The selection of the action alternative would not be expected to have any secondary impacts to unique, endangered, fragile or limited environmental resources.

Cumulative Impacts: Human disturbances such as highways, roads, houses, agricultural and industrial activities all impact wildlife species in the greater Madison Valley. The additional impacts introduced from the selection of the action alternative would be expected to be negligible. The additional impacts would not be expected to appreciably change current impacts upon unique, endangered, fragile or limited environmental resources.

Duration: The impacts of the selection of the action alternative are expected to be short-term.

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10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

Current Conditions

In both the action alternative and no-action alternative, the ground in which the asphalt plant would be placed has been stripped of topsoil and vegetation. Therefore, neither would be likely to contain historical or archaeological sites. If previously undiscovered archaeological or paleontological resources, are found during mining activities, AM Welles is required to stop work and notify the DNRC per the requirements of their aggregate take and remove permit.

Alternatives

No Action Alternative:

Direct Impacts: The asphalt plant would be placed upon pre-disturbed ground near Alder. No further digging or stripping of the ground's surface would be anticipated from the selection of the no action alternative. The no action alternative would not be expected to have any impact on historical and archaeological sites.

Secondary Impacts: There are no secondary impacts expected to historical and archaeological sites from the selection of the no action alternative.

Cumulative Impacts: There are no changes to cumulative impacts for historical and archaeological sites expected from the selection of the no action alternative.

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

Action Alternative:

Direct Impacts: The selection of the action alternative would place asphalt plant within the boundaries of the DSL gravel pit. The plant would be placed upon the pit floor which is approximately 20 feet lower than the original ground surface. The area in which the asphalt plant would be placed is void of vegetation and soil. No impacts to historical and archaeological sites would be anticipated, resulting from the selection of the no action alternative.

Secondary Impacts: There are no secondary impacts expected, resulting from the selection of the action alternative.

Cumulative Impacts: There are no changes to cumulative impacts for historical and archaeological sites expected from the selection of the no action alternative.

Duration: No impacts are anticipated, therefore the duration of impacts is not applicable.

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.

Issues and Concerns

- An asphalt plant will introduce an odor that will be noticed by residents, recreationists and wildlife near the project site.
- An asphalt plant will introduce additional noise.
- An asphalt plant will produce a visual disturbance either in the form of exhaust emitted from the plant or the plant will be visible itself.

Current Conditions

The DSL pit is located approximately three miles north of the town of Ennis, Montana along US highway 287. It is also approximately 1.5 miles south of the Troutdale subdivision and three miles south of the town of McAllister, Montana. The alternative site near Alder, Montana is approximately 23 road miles to the East of Ennis. The exact location of the site in Alder is unknown, as well as its proximity to residences. The DSL pit currently contributes aesthetic impacts to residences and recreationists nearby in the form of audible and visual disturbances. Highway 287 is also a large contributing factor to the audible disturbances of residences and recreationists near the pit. Alder experiences less traffic at slower velocities than the DSL site. Both Ennis and Alder are proximate to rivers that experience large amounts of recreation in the spring and summer months. Ennis and the DSL pit are near the Madison River, while Alder is near the Ruby River.

Alternatives

***No Action Alternative*:**

Direct Impacts: The no action alternative would place the asphalt plant near Alder, Montana. Direct aesthetic impacts would be noticed most largely by the employees of Riverside Contracting. The employees would be most near the asphalt plant during its operation. The asphalt plant would be expected to emit noise, visible exhaust, and odor. The employees of Riverside Contracting should wear all proper personal protective equipment in accordance with occupational safety and health standards in order to mitigate impacts to themselves. The direct impacts to aesthetics are expected to be moderate.

Secondary Impacts: Secondary aesthetic impacts to residents and recreationists in the Alder area would occur. The exhaust from the asphalt plant would be visible from the surrounding areas. The plant itself, may be visible from adjacent areas. Dependent upon proximity to the plant, wind speed, and wind direction; odor and noise from the plant may be realized by residents or recreationists. These impacts would be expected to be greatest when the asphalt plant is operational which is expected to be intermittent within the overall timeframe. Additionally, the selection of the no action alternative would include approximately 22,356 more vehicle miles travelled by the proponent to complete the project. The extra truck miles would impact visual and audible aesthetics along the additional miles of the haul route from the DSL pit to the asphalt plant location in Alder. Secondary impacts to aesthetics resulting from the selection of the action alternative are expected to be moderate.

Cumulative Impacts: The cumulative impacts expected from the selection of the no action alternative would be moderate. Overall, it is expected that aesthetic impacts related to increased traffic in the Alder area and along the MT highway 287 haul route would likely be the most noticeable. Alder is a rural community that does not experience much audible, visual, or other forms of aesthetic disturbance. The operation of the asphalt plant in the area would introduce moderate, additional, cumulative aesthetic impacts to an area mostly void of them currently.

Duration: The duration of aesthetic impacts from the selection of the no action alternative would be short-term and would be most noticeable when the plant is operational.

***Action Alternative*:**

Direct Impacts: The action alternative would place the asphalt plant within the boundaries of the DSL pit. Direct aesthetic impacts would be noticed most largely by the employees of Riverside Contracting and AM Welles. The employees would be most near the asphalt plant during its operation. The asphalt plant would be expected to emit noise, visible exhaust, and odor. The employees of Riverside Contracting and AM Welles should wear all proper personal protective equipment in accordance with occupational safety and health standards in order to mitigate aesthetic impacts to themselves. The direct impacts to aesthetics are expected to be moderate.

Secondary Impacts: Secondary aesthetic impacts to residents and recreationists near the DSL pit would occur. The exhaust from the asphalt plant would be visible from the surrounding areas. The plant itself, may be visible from adjacent areas. Dependent upon proximity to the plant, wind speed, and wind direction; odor and noise from the plant may be realized by residents or recreationists. These impacts would be expected to be greatest when the asphalt plant is operational which is expected to be intermittent within the overall timeframe. Additionally, the selection of the action alternative would save approximately 22,356 more vehicle miles travelled by the proponent to complete the project. The elimination of extra truck miles would decrease overall visual and audible aesthetics along the haul route of MT Highway 287. Secondary impacts to aesthetics resulting from the selection of the action alternative are expected to be moderate.

Cumulative Impacts: The cumulative impacts expected from the selection of the action alternative would be additive to the current aesthetic impacts of the DSL gravel mine and Highway 287. Machinery used to dig, crush, load and transport gravel are all present in the DSL pit. This machinery creates noise which can be heard by those proximate to the pit. The pit is largely shielded by berms from the Madison River, Ennis Lake and Highway 287. There have been reports of blowing dust from those recreating or living in the area. The operation of an asphalt plant would add some additional noise to the area. There may be some increases in truck traffic to and from the pit along Highway 287 during project operations, which would have both audible and visual impacts. This would be expected to occur in the no action alternative as well. Overall, the additional cumulative aesthetic impacts from the selection of the action alternative would be expected to be moderate.

Duration: The duration of aesthetic impacts is expected to be short-term and intermittent when the plant is operational.

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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.

Current Conditions

The current conditions of land, water, and air are included in sections 4, 5, 6 and 7 in this section. Energy sources in the form of diesel fuel and propane are readily available in the surrounding area.

Alternatives

No Action Alternative:

Direct Impacts: The no action alternative would place the asphalt plant at the Alder site. The impacts related to land, water and air are evaluated previously in this document in their respective resource sections. Energy resources needed for the project would include diesel fuel and propane. Both commodities are abundant in the area. The no action alternative would utilize more diesel fuel for trucking when compared to the action alternative. The most limited resource needed for the project is gravel. Both alternatives would utilize gravel from the DSL pit. Other sources of commercial gravel are scarce in the area, making it a limited resource. Overall, impacts to limited resources would be expected to be minor.

Secondary Impacts: Secondary impacts related to land, water and air are evaluated previously in this document, in their respective sections. There are no secondary impacts to energy or other limited resources from the selection of the no action alternative.

Cumulative Impacts: The cumulative impacts of the no action alternative to land, water, and air are evaluated previously in their respective resource sections. Energy resources in Montana are abundant but not unlimited. The selection of the no action alternative would utilize more diesel fuel than the action alternative. However, the difference is expected to have a negligible impact on the availability and access of energy in the area.

Duration: The duration of impacts resulting from the selection of the no action alternative are expected to be short-term.

Action Alternative:

Direct Impacts: The action alternative would place the asphalt plant at the DSL site. The impacts related to land, water and air are evaluated previously in this document in their respective resource sections. Energy resources needed for the project would include diesel fuel and propane. Both commodities are abundant in the area. The no action alternative would utilize more diesel fuel for trucking when compared to the action alternative. The most limited resource needed for the project is gravel. Both alternatives would utilize gravel from the DSL pit. Other sources of commercial gravel are not readily available in the area, making it a limited resource. Overall, impacts to limited resources would be expected to be minor.

Secondary Impacts: Secondary impacts related to land, water and air are evaluated previously in this document, in their respective sections. There are no secondary impacts to energy or other limited resources from the selection of the action alternative.

Cumulative Impacts: The cumulative impacts of the action alternative to land, water, and air are evaluated previously in their respective resource sections. Energy resources in Montana are abundant but not unlimited. The selection of the no action alternative would utilize more diesel fuel that action alternative. However, the difference is expected to have a negligible impact on the availability and access of energy in the area.

Duration: The duration of impacts resulting from the selection of the action alternative are expected to be short-term.

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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.

Issues and Concerns

- The authorization of an asphalt plant would harm the grazing lessee.

Current Conditions

The tract currently has an operational gravel pit which is permitted via the Montana DNRC through aggregate take and remove permit G-1273-94 and the Montana DEQ through Opencut permit 674. An expansion of this pit was evaluated and permitted by both agencies in 2022 and 2023. Both agencies completed an environmental assessment associated with the expansion which are on the Department's website. The DEQ opencut permit 674 and the accompanying environmental analysis, includes the ability to operate an asphalt plant and the impacts expected from the Montana DEQ.

The tract also contains a grazing lease, in which Valley Garden Land and Cattle is the lessee.

Alternatives

No Action Alternative:

Direct Impacts: Although the asphalt plant would be placed in Alder under the selection of the no action alternative, it is still anticipated that the project would utilize gravel from the DSL pit to create asphalt, which is authorized under aggregate take and remove permit G-1273-94 and Montana DEQ Opencut permit #674. The utilization of gravel from the pit would have a positive impact for the gravel permittee and State of Montana Trust Lands. The no action alternative would have no impact to the State of Montana Trust Lands grazing lease on the DSL tract.

Secondary Impacts: The no action alternative would not have any secondary impacts on other plans or projects on the tract, as the asphalt plant would be located at the Alder site.

Cumulative Impacts: The no action alternative would not be expected to have any cumulative impact upon the plans or projects on the tract, as the asphalt plant would be located at the Alder site.

Duration: No impacts are anticipated, therefore the duration of impacts is not applicable.

Action Alternative:

Direct Impacts: As listed above in the current conditions portion of this resource section, this tract contains two separately permitted activities by the Montana DNRC. The first is an aggregate take and remove permit, which authorizes, in conjunction with a Montana DEQ opencut permit, the ability to mine gravel on State of Montana Trust Lands. Additionally, there is a State of Montana Trust Lands Grazing lease on this tract. It is held by Valley Garden Land and Cattle. The selection of the action alternative would utilize gravel from the DSL pit to generate asphalt onsite. The selection of the action alternative would be expected to have positive impacts for the aggregate take and remove permittee as well as State of Montana Trust Lands. If livestock are present on the tract during the temporary authorization of the asphalt plant, the selection of the action alternative would be expected to have some minor impact on the State of Montana Grazing Lessee. These impacts would include noise from asphalt generation, sights of exhaust from the asphalt plant, and an odor from asphalt generation. These impacts are expected to be minor both to the livestock and the individuals managing them and should in no way impact the monetary value of the lease.

Secondary Impacts: There are no secondary impacts to other plans or projects on the tract expected from the selection of the action alternative.

Cumulative Impacts: There are no additional cumulative impacts from the selection of the action alternative to plans or projects on the tract.

Duration: The duration of impacts resulting from the selection of the action alternative are expected to be short-term.

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.

Issues and Concerns

- Asphalt production releases noxious fumes or toxins through its exhaust.
- Asphalt production is dangerous for the employees generating it.
- Increased heavy truck traffic will impact the safety of motorists.
- Drinking water quality will be impacted by the authorization of an asphalt plant, therefore impacting human health.

Current Conditions

The current human health and safety risks on the tract are the gravel mine and Highway 287. The gravel mine poses occupational hazards to the employees that operate it. Personal protective equipment, OSHA regulations and MSHA regulations all mitigate risks to employees of A.M. Welles and Riverside. Highway 287 poses safety risks to motorists especially near the entrance and exit of the DSL pit. Large trucks entering and exiting the pit move at much slower speeds than the normal traffic flow on Highway 287. Trucks entering signage is constructed on both the north and south sides of the DSL to caution motorists. Trucks would continue to enter and exit the pit under both alternatives being considered.

No Action Alternative:

Direct Impacts: Impacts to water quality are evaluated in section 5 of this document. As provided in that section, the impacts to water quality are unclear with respect to the no action alternative. Therefore, the DNRC is not able to determine impacts to human health related to water quality at the Alder site.

The no action alternative would place the asphalt plant near Alder, Montana. To operate an asphalt plant in Montana, a permit from the Montana DEQ's Air Quality Bureau is required. The Environmental Protection Agency (EPA) regulates exhaust emissions from mobile nonroad engines (asphalt plants). They work together with the manufacturers of asphalt plants to ensure they meet national standards. The Montana DEQ Air Quality Bureau ensures these limitations are met. According to the MT DEQ, Particulate Matter (PM), Nitric Oxides (NOx) and Carbon Monoxide (CO) are all emitted by asphalt plants. At certain concentrations, all these substances can be detrimental to human health, but the EPA and DEQ have developed standards and limitations to these emissions to protect the individuals working near the plant and the public. If an individual believes that a specific plant is exceeding the limitations set forth by the DEQ, they may contact the DEQ's Enforcement staff and report the issue. There are no impacts to human health and safety expected from the selection of the no action alternative related to asphalt plant emissions because the regulations set forth by the Montana DEQ and EPA would be followed.

As previously mentioned, within this document, the no action alternative would require 22,356 more vehicle miles travelled when compared to the action alternative. The additional heavy truck traffic miles would increase the potential of a vehicle-vehicle collision along the haul route. The impacts to human health and safety from the selection of the no action alternative related to traffic increases are expected to be minor.

Secondary Impacts: The selection of the no action alternative is not expected to have any secondary impacts on human health and safety.

Cumulative Impacts: The selection of the no action alternative would not be expected to have significant cumulative impacts to human health or safety. The project would occur during a time when air quality is mostly good, and seasonal traffic is lower than during the peak summer months. Cumulative impacts to human health and safety would be expected to be minor.

Duration: The duration of impacts from the selection of the no action alternative are expected to be short-term.

Action Alternative:

Direct Impacts: Impacts to water quality are evaluated in section 5 of this document. As provided in that section, no impacts to water quality are expected to occur from the selection of the action alternative. Therefore, no impacts to human health and safety are expected to occur as it relates to water quality.

The action alternative would place the asphalt plant in the DSL pit. To operate an asphalt plant in Montana, a permit from the Montana DEQ's Air Quality Bureau is required. The Environmental Protection Agency (EPA) regulates exhaust emissions from mobile nonroad engines (asphalt plants). They work together with the manufacturers of asphalt plants to ensure they meet national emissions standards. The Montana DEQ Air Quality Bureau ensures these limitations are met. According to the Montana DEQ Particulate Matter (PM), Nitric Oxides (NOx) and Carbon Monoxide (CO) are all emitted by asphalt plants. At certain concentrations, all these

substances can be detrimental to human health, but the EPA and DEQ have developed standards and limitations to these emissions to protect the individuals working near the plant and the public. If an individual believes that a specific plant is exceeding the limitations set forth by the DEQ, they may contact the DEQ's Enforcement staff and report the issue. There are no impacts to human health and safety expected from the selection of the action alternative, related to asphalt plant emissions because of the regulations set forth by the DEQ and EPA.

As previously mentioned, within this document, the no action alternative would require 22,356 more vehicle miles travelled when compared to the action alternative. The decreased heavy truck traffic miles from the selection of the action alternative would decrease the potential of a vehicle collision along the haul route. The impacts to human health and safety from the selection of the action alternative related to traffic are expected to be moderate, but less than those of the no action alternative.

Secondary Impacts: There are no secondary impacts expected to human health or safety from the selection of the action alternative.

Cumulative Impacts: The selection of the no action alternative would not be expected to have significant cumulative impacts to human health or safety. The project would occur during a time when air quality is mostly good, and seasonal traffic is lower than during the peak summer months. Cumulative impacts to human health and safety would be expected to be minor.

Duration: The duration of impacts resulting from the selection of the action alternative would be short-term.

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15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

Issues and Concerns

- The asphalt plant would be detrimental to the tourism and fly-fishing industries.
- The production of local asphalt helps the local economy and businesses by providing essential services at low costs.

Current Conditions

The Madison Valley is largely void of industrial or commercial activities comparative to larger cities in Montana. Ennis is the largest town center and contains small businesses and local services. The A.M. Welles gravel pit is one of the largest industrial/commercial activities in the area. Another commercial industry in the area is tourism. Many businesses in town rely upon tourism dollars that support small businesses such as restaurants, fly-fishing shops, and guides. Possibly the largest commercial activity in the valley is agriculture. Local farmers and ranchers produce crops and livestock.

No Action Alternative:

Direct Impacts: The no action alternative would place the asphalt plant at the Alder site. The production of asphalt is essential in repairing and maintaining the roads of Montana. Without the production of asphalt, the highways of Montana would degrade to a point that would negatively impact all industrial, commercial, and agricultural activity. Therefore, the selection of the no action alternative would be expected to have positive impacts upon all commercial industries including tourism, fly-fishing and agriculture. The selection of the no action alternative would not be expected to have any negative impacts on industrial, commercial, or agriculture activities and production.

Secondary Impacts: The selection of the no action alternative will not have any secondary impacts on industrial, commercial and agriculture activities.

Cumulative Impacts: Asphalt production around the State of Montana is essential to industrial, commercial, and agricultural activities. It allows for the transportation of goods and services and provides the ability for the workforce to travel to and from their jobs. It also provides the ability to transport tourists, guides, fly-fisherman and other recreationists around the valley. The additional cumulative impact of the selection of the no action

alternative would be expected to be negligible, but positive in nature as it relates to industrial, commercial and agriculture activities.

Duration: The duration of impacts from the selection of the no action alternative are expected to be beneficial and exist beyond the completion of the project, otherwise long-term.

Action Alternative:

Direct Impacts: The action alternative would place the asphalt plant at the DSL site. The production of asphalt is essential in repairing and maintaining the roads of Montana. Without the production of asphalt, the highways of Montana would degrade to a point that would negatively impact all industrial, commercial, and agriculture activity. Therefore, the selection of the action alternative would be expected to have positive impacts upon all commercial industries including tourism, fly-fishing and agriculture. The selection of the action alternative would not be expected to have any negative impacts on tourism or fly-fishing. Tourists, in the area would be subjected to the same aesthetic impacts that locals would be.

Secondary Impacts: The selection of the action alternative is expected to have no secondary impacts to industrial, commercial, and agriculture activities in the area.

Cumulative Impacts: Asphalt production around the State of Montana is essential to industrial, commercial, and agricultural activities. It allows for the transportation of goods and services and provides the ability for the workforce to travel to and from their jobs. It also provides the ability to transport tourists, guides, fly-fisherman, and other recreationists around the valley. The additional cumulative impact of the selection of the action alternative would be expected to be negligible, but positive in nature as it relates to industrial, commercial and agriculture activities.

Duration: The duration of impacts from the selection of the no action alternative are expected to be beneficial and exist beyond the completion of the project, otherwise long-term.

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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.

Current Conditions

Employment in the area consists mostly of farmers and ranchers, small businesses catering towards tourism, and fly-fishing shops and guides. A.M. Welles has been a local employer for generations.

***No Action Alternative*:**

Direct Impacts: The no action alternative would not be expected to have any direct impacts on the quantity and distribution of employment.

Secondary Impacts: The no action alternative would not be expected to have any secondary impacts on the quantity and distribution of employment.

Cumulative Impacts: The no action alternative would not be expected to change cumulative impacts relating to quantity and distribution of employment.

Duration: No impacts to quantity and distribution of employment were identified resulting from the selection of the action alternative. Therefore, the duration of impacts is not applicable.

Action Alternative:

Direct Impacts: The selection of the action alternative is expected to have no impact to the quantity and distribution of employment in the area.

Secondary Impacts: The selection of the action alternative is expected to have no secondary impacts to the quantity and distribution of employment in the area.

Cumulative Impacts: There are no cumulative impacts expected to quantity and distribution of employment from the selection of the action alternative.

Duration: No impacts were identified from the selection of the action alternative to quantity and distribution of employment; therefore duration is not applicable.

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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.

Current Conditions

Residents and businesses of Montana pay local, state, and federal taxes on income and property. Taxes support a wide variety of government services including the construction and maintenance of local roads.

No Action Alternative:

Direct Impacts: The no action alternative would place the asphalt in Alder, Montana. As previously mentioned in this analysis, the no action alternative would include a significantly greater amount of truck miles and diesel fuel comparative to the action alternative. The completion of the road job that necessitates the asphalt plant is contracted by the Montana Department of Transportation (MDT). MDT utilizes tax dollars to complete these infrastructure projects. The increases in trucking costs would either be absorbed by MDT or Riverside Contracting. The prior could result in an increase in the total tax base needed to complete road projects when compared to the action alternative. However, these increases are likely to be negligible on an individual tax basis.

Secondary Impacts: The selection of the no action is not expected to have any secondary impact on local and state tax base and revenue.

Cumulative Impacts: There is no change to cumulative impacts expected from the result of the no action alternative.

Duration: The duration of impacts from the selection of the no action alternative would be expected to be short term.

Action Alternative:

Direct Impacts: The selection of the action alternative would place the asphalt plant within the boundaries of the DSL pit. As previously mentioned in this analysis, the action alternative would require a significantly less amount of truck miles when compared to the no action alternative. The completion of the road job that necessitates the asphalt plant is contracted by the Montana Department of Transportation. MDT utilizes tax dollars to complete infrastructure projects. The savings in trucking costs would be realized by either the MDT or Riverside contracting. The prior could result in a decrease in the total tax base needed to complete road projects when compared to the no action alternative. However, these savings are likely to be negligible on an individual tax basis.

Secondary Impacts: The selection of the action alternative would have no secondary impacts to local and state tax bases.

Cumulative Impacts: There is no change to cumulative impacts expected to local and state tax bases from the selection of the action alternative.

Duration: Any impact to the local and state tax base is expected to be short-term.

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

Issues and Concerns

- The authorization of an asphalt plant would increase truck traffic in the area.

Current Conditions

US Highway 287 facilitates the entrance and exit to and from the DSL pit. US Highway 287 services many motorists especially in the summer months. MT Highway 287 is the route that connects Alder, Montana and Ennis, Montana. This portion of the highway is typically less busy than near the DSL pit.

Alternatives

No Action Alternative:

Direct Impacts: The no action alternative would place the asphalt plant near Alder, Montana. As previously discussed in this document, the no action alternative would include an additional 22,356 truck miles when compared to the action alternative. Overall, the impacts to traffic patterns would be minor from the selection of the no action alternative. Increases in traffic congestion and traffic related delays along US or MT Highway 287 may result from the selection of the no action alternative. There are no impacts to fire protection, police or schools expected, resulting from the selection of the no action alternative.

Secondary Impacts: The no action alternative would not be expected to have any secondary impacts to demands for government services.

Cumulative Impacts: The no action alternative is not expected to change cumulative impacts to demand for government services.

Duration: The duration of impacts resulting from the selection of the no action alternative will be short-term

Action Alternative:

Direct Impacts: As previously discussed in this document, the no action alternative would require 22,356 more truck miles than the action alternative. The action alternative would still be expected to have minor impacts on traffic patterns along US or MT Highway 287, but they would be lesser than those realized from the no action alternative.

Secondary Impacts: No secondary impacts are expected to government services from the selection of the action alternative.

Cumulative Impacts: There are no cumulative impacts expected to government services from the selection of the action alternative.

Duration: The duration of the impacts to government services are expected to be short-term.

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.

Current Conditions

The tract is not zoned, and there is not a management plan for the tract. The Valley Garden Land and Cattle Ranch which neighbors the tract, is under a conservation lease. Conservation leases are not allowed on State of Montana Trust Lands other than in certain instances specifically stated in statute.

No Action Alternative:

Direct Impacts: The no action alternative would place the asphalt near Alder, Montana. The Department is unaware of any zoning or management plans at the Alder site.

Secondary Impacts: No secondary impacts to locally adopted environmental plans and goals would occur from the selection of the no action alternative.

Cumulative impacts: No changes to cumulative impacts are expected from the selection of the no action alternative.

Duration: No impacts were identified for the no action alternative, therefor duration is not applicable.

Action Alternative:

Direct Impacts: The project area is not zoned. The surrounding landowner, Valley Garden Land and Cattle has a conservation easement covering their property. State of Montana Trust Lands are not eligible for conservation easements, outside of instances specifically identified in statute. The selection of the action alternative is not expected to have any direct impacts upon the conservation easement on the adjacent lands.

Secondary Impacts: The selection of the action alternative is not expected to have any secondary impacts upon locally adopted environmental plans and goals.

Cumulative Impacts: No changes to cumulative impacts are expected to locally adopted environmental plans or goals from the selection of the action alternative.

Duration: No impacts were identified for the action alternative, therefor duration is not applicable.

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.

Issues and Concerns

- The introduction of an asphalt plant at the DSL site would impact recreational activities on Ennis Lake, the Madison River and the surrounding valley.
- The introduction of an asphalt would have impacts on quality of recreation in the Lee Metcalf Wilderness

Current Conditions

Neither the DSL site nor the Alder site provide access to wilderness areas. The tract upon which the DSL site is located is publicly accessible from Highway 287. This tract does not receive large amounts of recreational activity, likely due to the current operation of the DSL pit and the relative size of the tract. The DSL pit is located

approximately 1.5 miles from the main channel of the Madison River and Ennis Lake. Both Ennis Lake and the Madison River receive considerable amounts of recreation in the spring and summer months.
The Alder site is not located on State of Montana School Trust Lands. Alder is directly adjacent to the Ruby River which also receives a large amount of recreation during the spring and summer months.

Alternatives

No Action Alternative:

Direct Impacts: If the no action alternative is selected, the asphalt plant will be placed near Alder, Montana. As mentioned in the current conditions of this section, Alder is adjacent to the Ruby River. The Ruby River attracts recreational activity mostly in the form of fishermen in the spring and summer months. During asphalt plant operations, recreationists near Alder, along the Ruby River, or other attractions may experience aesthetic impacts as described within section 11 of this document. Overall, the impacts of access to and quality of recreation are expected to be minor from the selection of the no action alternative. Some odor, audible and visual disturbances may be present during asphalt plant operation.

Secondary Impacts: There are no secondary impacts expected to access to and quality of recreational and wilderness activity from the selection of the no action alternative.

Cumulative Impacts: There are no changes to cumulative impacts of access to and quality of recreation and wilderness activity from the selection of the no action alternative.

Duration: The duration of impacts resulting from the selection of the no action alternative are expected to be short-term.

Action Alternative:

Direct Impacts: If the action alternative is selected, the asphalt plant will be placed within the boundaries of the DSL pit. As previously mentioned, this site is near the Madison River and Ennis Lake. Many people recreate on the Madison River and Ennis Lake particularly in spring and summer months. During asphalt plant operation, recreationists in the area may experience aesthetic impacts as described within section 11 of this document. Overall, the impacts of access to and quality of recreation are expected to be minor from the selection of the action alternative. Some odor, audible and visual disturbances may be present during asphalt plant operation.

Secondary Impacts: No secondary impacts to access to and quality of recreation are expected from the selection of the action alternative.

Cumulative Impacts: No additional cumulative impacts to access to and quality of recreation are expected from the selection of the action alternative.

Duration: Impacts, to access to and quality of recreational activities are expected to be short-term.

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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.

Issues and Concerns

- The introduction of an asphalt plant will impact the value of nearby property and homes.

Current Conditions

The closest towns to the action alternative site are Ennis and McAllister, the Troutdale subdivisions are also nearby. The closest town to the no action alternative site is Alder.

Alternatives

No Action Alternative:

Direct Impacts: The selection of the no action alternative is not expected to have any direct impacts on density and distribution of population and housing in the area.

Secondary Impacts: The selection of the no action alternative is not expected to have any secondary impacts on density and distribution of population and housing in the area.

Cumulative Impacts: There are no changes to cumulative impacts anticipated from the selection of the no action alternative.

Duration: No impacts were identified for the selection of the no action alternative; therefore, duration is not applicable.

Action Alternative:

Direct Impacts: The action alternative would not be expected to have any impact on density and distribution of population and housing in the area. The operation of an asphalt plant for the identified period would have no negative impact upon the value to adjacent homes or properties.

Secondary Impacts: The selection of the action alternative is not expected to have any secondary impacts to the density and distribution of population and housing.

Cumulative Impacts: There are no changes to cumulative impacts expected to the density and distribution of population and housing from the selection of the action alternative.

Duration: No impacts were identified for the selection of the action alternative; therefore, duration is not applicable.

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22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

Current Conditions

The Department is unaware of any native or traditional communities in either the no action alternative area or the action alternative area.

Alternatives

No Action Alternative:

Direct Impacts: The no action alternative is not expected to have any direct impacts on social structures.

Secondary Impacts: The no action alternative is not expected to have any secondary impacts on social structures.

Cumulative Impacts: The no action alternative is not expected to change any cumulative impacts to social structures.

Duration: No impacts were identified for the selection of the no action alternative; therefore, duration is not applicable.

Action Alternative:

Direct Impacts: There are no direct impacts anticipated to social structures from the selection of the action alternative.

Secondary Impacts: The selection of the action alternative would have no secondary impacts to social structures.

Cumulative Impacts: There are no changes to cumulative impacts expected to social structures from the selection of the action alternative.

Duration: No impacts were identified for the selection of the action alternative; therefore, duration is not applicable.

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23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

Issues and Concerns

- The Madison Valley is scenic and beautiful, an asphalt plant does not belong in a place such as this.

Current Conditions

The no action alternative and the action alternative are both located in a rural portion of Southwestern Montana, where recreation and tourism are two of the main economic industries. These locations are like many of the valleys in western Montana, in that they are surrounded by mountains and have lakes, rivers, creeks and tributaries within them. The Madison Valley is not overly unique nor distinct from other valleys throughout the state.

No Action Alternative:

Direct Impacts: The selection of the no action alternative would not be expected to have any direct impacts on the cultural uniqueness and diversity of the area.

Secondary Impacts: The selection of the no action alternative would not be expected to have any secondary impacts on the cultural uniqueness and diversity of the area.

Cumulative Impacts: The selection of the no action alternative would not be expected to have any changes on cumulative impacts to cultural uniqueness and diversity.

Duration: No impacts were identified from the selection of the no action alternative. therefore, duration is not applicable.

Action Alternative:

Direct Impacts: The selection of the action alternative is expected to have no impacts to the cultural uniqueness and diversity of the project area.

Secondary Impacts: The selection of the action alternative is expected to have no secondary impacts to the cultural uniqueness and diversity of the project area.

Cumulative Impacts: There are no changes to cumulative impacts expected to cultural uniqueness from the selection of the action alternative.

Duration: No impacts were identified from the selection of the action alternative. Therefore, the duration of impacts is not applicable.

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.

Alternatives

No Action Alternative:

Direct Impacts: The selection of the no action alternative would deny A.M. Welles' request to operate an asphalt plant within the boundaries of the DSL pit. If this alternative is selected, it is anticipated that the asphalt plant will be located and operated near Alder, Montana. It is also anticipated that Riverside Contracting will utilize aggregate from the DSL pit for the no action alternative. The total amount of aggregate needed for the completion of the job is approximately 16,758 tons. Each cubic yard of material weighs approximately 1.5 tons. Therefore, it is estimated that the job will utilize 11,172 cubic yards. At the contracted rate of $1.50/yard, the common schools trust is expected to receive approximately $16,758 in gravel royalties from this project. As described previously in this document, the selection of the no action alternative would add a considerable amount of trucking miles and costs associated with those miles. This increased cost would not impact the expected return to the common schools trust but would rather be included in the total project cost which is funded through taxpayer dollars. The no action alternative would not have any impact on the ability to conduct future projects on the DSL tract.

Secondary Impacts: Gravel royalties, much like other mineral royalties on Trust Lands are non-distributable. This means that all royalty money generated from gravel is placed into an interest-bearing account for the appropriate Trust. The principal amount is never distributed, rather only the interest. This provides security and long-term financial support for the Trust. It is expected that revenue generated from the selection of the no action alternative, would benefit the common schools trust into perpetuity.

Cumulative Impacts: The generation of revenue from the selection of the no action alternative would be additive to the current balance of the permanent fund for the common schools trust. The additional principal amount would generate a larger interest amount to be allocated and distributed to the common schools trust.

Duration: The duration of impacts from the selection of the no action alternative is expected to be long-term as the royalties generated from the project will accumulate interest over time and continually benefit the common schools trust.

Action Alternative:

Direct Impacts: The selection of the action alternative would authorize A.M. Welles' request to operate an asphalt plant within the boundaries of the DSL pit. If this alternative is selected, it is anticipated that Riverside Contracting will utilize aggregate from the DSL pit. The total amount of aggregate needed for the completion of the job is approximately 16,758 tons. Each cubic yard of material weighs approximately 1.5 tons. Therefore, it is estimated that the job will utilize 11,172 cubic yards. At the contracted rate of $1.50/yard, the common schools trust is expected to receive approximately $16,758 in gravel royalties from this project. As described previously in this document, the selection of the action alternative would eliminate a considerable amount of trucking miles and costs associated with those miles when compared to the no action alternative. The savings in cost would not impact the expected return to the common schools trust but would rather be included in the total project cost which is funded through taxpayer dollars. The action alternative would not have any impact on the ability to conduct future projects on the DSL tract. It is anticipated that both the operation of the DSL pit, and the grazing lease will continue beyond the completion of the project.

Secondary Impacts: Gravel royalties, much like other mineral royalties on Trust Lands are non-distributable. This means that all royalty money generated from gravel is placed into an interest-bearing account for the appropriate Trust. The principal amount is never distributed, rather only the interest. This provides security and long-term financial support for the Trust. It is expected that revenue generated from the selection of the action alternative, would benefit the Common School Trust into perpetuity.

Cumulative Impacts: The generation of revenue from the selection of the action alternative would be additive to the current balance of the permanent fund for the Common School Trust. The additional principal amount would generate a larger interest amount to be allocated and distributed to the Common Schools.

Duration: The duration of impacts from the selection of the no action alternative is expected to be long-term as the royalties generated from the project will accumulate interest over time and continually benefit the common schools trust.

EA Checklist Prepared By:	**Name:** Zack Winfield, PE	**Date: 3/7/24**
	Title: Petroleum Engineer	

V. FINDING

25. ALTERNATIVE SELECTED:

25. SIGNIFICANCE OF POTENTIAL IMPACTS

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

☐ EIS ☐ More Detailed EA ☐ No Further Analysis

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