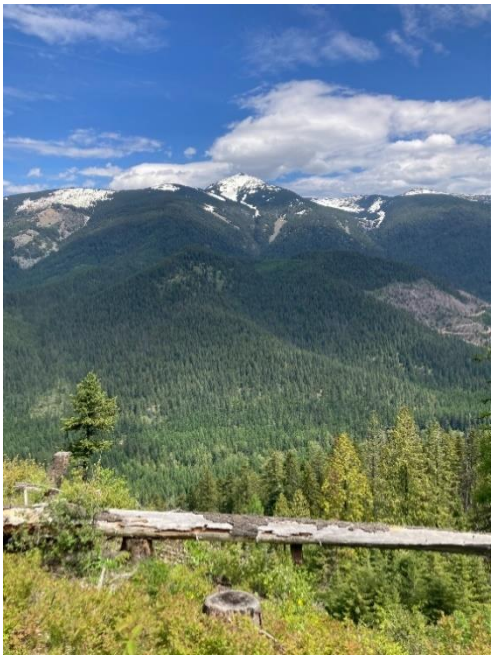
Middle Henry Expansion

Rock Permit

Environmental Assessment

Checklist



Plains Unit

Northwest Land Office

Montana Department of Natural Resources and Conservation

October 2023

Middle Henry Expansion

Rock Permit

Environmental Assessment Checklist

Table of Contents

Environmental Assessment Checklist

Project Name: Middle Henry Expansion Rock Permit
Proposed Implementation Date: May, 2023
Proponent: Juan Lulack, dba Block Mountain Slate and Stone, Plains Unit, Northwest Land Office, Montana DNRC
County: Sanders

Type and Purpose of Action

Description of Proposed Action:

The Plains Unit of the Montana Department of Natural Resources and Conservation (DNRC), along with Juan Lulack dba Block Mountain Slate and Stone, is proposing to expand the Middle Henry Rock Permit. The project is located approximately 5 air miles West of Plains, MT (refer to Attachments vicinity map A-1 and project map A-2) and includes the following sections:

Beneficiary	Legal Description	Total Acres	Treated Acres
Common Schools	**T20N R25W S34**	**477.4**	**17.1**

Objectives of the project include:

- The primary objective would be to harvest dimensional rock and produce revenue for the Common School Trust Grant.

Proposed activities include:

Action	Quantity
Proposed Harvest Activities	# Acres
Clearcut	
Seed Tree	
Shelterwood	
Selection	
Old Growth Maintenance/Restoration	
Commercial Thinning	
Salvage	
Total Treatment Acres	
Proposed Forest Improvement Treatment	# Acres
Pre-commercial Thinning	
Site preparation/scarification	
Planting	
Proposed Road Activities	# Miles

Action	Quantity
New permanent road construction	
New temporary road construction	
Road maintenance	7.4
Road reconstruction	
Road abandoned	
Road reclaimed	
Other Activities	
Dimensional Rock	17.1 acres

Duration of Activities:	10 years
Implementation Period:	May 2023-May 2033

The lands involved in this proposed project are held in trust by the State of Montana. (Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X, Section 11). The Board of Land Commissioners and the DNRC are required by law to administer these trust lands to produce the largest measure of reasonable and legitimate return over the long run for the beneficiary institutions (Section 77-1-202, MCA).

The DNRC would manage lands involved in this project in accordance with:

- The State Forest Land Management Plan (DNRC 1996),
- Administrative Rules for Forest Management (ARM 36.11.401 through 471),
- The Montana DNRC Forested State Trust Lands Habitat Conservation Plan (HCP) (DNRC 2010)
- and all other applicable state and federal laws.

Project Development

SCOPING:

- DATE:
  - 6/5/2023
- PUBLIC SCOPED:
  - Adjacent landowners
- AGENCIES SCOPED:
  - USFS Plains, DNRC
- COMMENTS RECEIVED:
  - How many: 0
  - Concerns: 0
  - Results :
    - No comments or concerns were received from the public.

DNRC specialists were consulted, including: Justin Cooper (Wildlife), Tony Nelson (Hydrologist) and Patrick Rennie (Archaeologist)

Internal and external issues and concerns were incorporated into project planning and design and will be implemented in associated contracts.

OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED: *(Conservation Easements, Army Corps of Engineers, road use permits, etc.)*

- **Small Miner Exclusion Statement – Department of Environmental Quality**
- **Registration-Mine Safety and Health Administration**
- **United States Fish & Wildlife Service-** DNRC is managing the habitats of threatened and endangered species on this project by implementing the Montana DNRC Forested Trust Lands HCP and the associated Incidental Take Permit that was issued by the United States Fish & Wildlife Service (USFWS) in February of 2012 under Section 10 of the Endangered Species Act. The HCP identifies specific conservation strategies for managing the habitats of grizzly bear, Canada lynx, and three fish species: bull trout, westslope cutthroat trout, and Columbia redband trout. This project complies with the HCP. The HCP can be found at http://dnrc.mt.gov/divisions/trust/forest-management/hcp.
- **Montana Department of Environmental Quality (DEQ)-** DNRC is classified as a major open burner by DEQ and is issued a permit from DEQ to conduct burning activities on state lands managed by DNRC. As a major open-burning permit holder, DNRC agrees to comply with the limitations and conditions of the permit.
- **Montana/Idaho Airshed Group-** The DNRC is a member of the Montana/Idaho Airshed Group which was formed to minimize or prevent smoke impacts while using fire to accomplish land management objectives and/or fuel hazard reduction (Montana/Idaho Airshed Group 2010). As a member, DNRC must submit a list of planned burns to the Airshed Group's Smoke Monitoring Unit describing the type of burn to be conducted, the size of the burn in acres, the estimated fuel loading in tons/acre, and the location and elevation of each burn site. The Smoke Monitoring Unit provides timely restriction messages by airshed. DNRC is required to abide by those restrictions and burn only when granted approval by the Smoke Monitoring Unit when forecasted conditions are conducive to good smoke dispersion.

ALTERNATIVES CONSIDERED:

No-Action Alternative: Under this alternative, no dimensional stone would be harvested and therefore no revenue would be generated from the project area for the Common Schools Trust.

Action Alternative :
This commercial dimensional stone harvest would take place using ground-based excavating methods on 17.1 acres to remove an estimated 500 tons of dimensional stone, generating revenue for the Common Schools Trust.

Impacts on the Physical Environment

Evaluation of the impacts on the No-Action and Action Alternatives including **direct, secondary, and cumulative** impacts on the Physical Environment.

VEGETATION:

Vegetation Existing Conditions:

Harvest Unit	Habitat Group	Fire Regime	Current Cover Type	Age Class (years)	DFC	RX	Acres
1	Moderately Cool and dry (Westside)	Low-to-mixed	Western Larch/Douglas Fir	150-199	Ponderosa Pine	Other Salvage	17.1

Fire Hazard/Fuels: Fire Hazard and fuels would be low, the harvest unit is a rock scree with moss, limited vegetation and trees surrounding the unit. The project area is not within the wildland-urban interface.

Insects and Diseases: Mistletoe is present in Douglas fir and Western larch in surrounding rock scree

Sensitive/Rare Plants: No plant species of concern identified by the MNHP in the project area.

Noxious Weeds: Spotted Knapweed

Vegetation	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Current Cover/DFCs	X				X				X					
Age Class	X				X				X					
Old Growth	X				X				X					
Fire/Fuels	X				X				X					
Insects/Disease	X				X				X					
Rare Plants	X				X				X					
Noxious Weeds		X				X				X				
Action														
Current Cover/DFCs	X				X				X					
Age Class	X				X				X					

Vegetation	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Old Growth	**X**				**X**				**X**					
Fire/Fuels	**X**				**X**				**X**					
Insects/Disease	**X**				**X**				**X**					
Rare Plants	**X**				**X**				**X**					
Noxious Weeds		**X**				**X**				**X**			**Y**	**V-1**

Comments:
V-1 See vegetation mitigations

Vegetation Mitigations:

- To minimize the potential for the spread of noxious weed, off-road equipment would be cleaned and inspected as required in the timber sale contract to avoid seed migration and roadsides will be sprayed post-harvest.
- If any sensitive plant species are observed within the project area, an equipment restriction zone would be made around the specimen and a plant survey would be completed.

SOIL DISTURBANCE AND PRODUCTIVITY:

Soil Disturbance and Productivity Existing Conditions:

Soils in the project area were reviewed using Web Soil Survey. A total of 2 distinct map units were identified (32F, 122G). The soil textures range from 'Winkler, cool-Sharrott ,cool-Rubble land complex, 40-85% slopes' on the rock scree to 'Mitten gravelly ashy silty loam' and 'Mitten family, moderately steep mountain slopes, weakly weathered meta sedimentary rock' outside of the rock scree. Erosion hazard is generally low since work will be done on the rock scree.

Previous harvest in the state parcel is documented from 1953-1997. Harvesting of forest products was done with multiple small sales comprising of 3.1 mbf which included sawtimber and firewood. During field review a skid trail was observed for reconditioning.

Soil Disturbance and Productivity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Physical Disturbance (Compaction and Displacement)	**X**				**X**				**X**					

Soil Disturbance and Productivity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Erosion	**X**				**X**				**X**					
Nutrient Cycling	**X**				**X**				**X**					
Slope Stability	**X**				**X**				**X**					
Soil Productivity	**X**				**X**				**X**					
Action														
Physical Disturbance (Compaction and Displacement)		**X**				**X**				**X**			**Y**	**S-1**
Erosion		**X**				**X**				**X**			**Y**	**S-1**
Nutrient Cycling	**X**				**X**				**X**					
Slope Stability		**X**				**X**				**X**			**Y**	**S-2**
Soil Productivity	**X**				**X**				**X**					

Comments:
S-1: Some minor displacement may occur to surface soil layers due to the removal of surface rock for this project. This displacement would only affect rocky layers, and would not lead to surface erosion or fine sediment generation or delivery.

S-2: Digging into rock scree and sorting for decorative rock may lead to over-steepened slopes where equipment digs in to extract rock. This may lead to minor settling of rock layers from above the extraction area. These are not expected to be mass movement events, but these sites may take a few years to reach equilibrium once disturbed.

Soil Mitigations:

WATER QUALITY AND QUANTITY:

Water Quality and Quantity Existing Conditions: No stream or existing fisheries conditions within unit area.

Water Quality & Quantity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Water Quality	**X**				**X**				**X**					
Water Quantity	**X**				**X**				**X**					
Action														
Water Quality	**X**				**X**				**X**					
Water Quantity	**X**				**X**				**X**					

Comments: There does not appear to be any surface water or stream crossings on the state parcel where the permit would be located. No significant impacts identified.

Water Quality & Quantity Mitigations: None

FISHERIES:

Fisheries Existing Conditions: No stream or existing fisheries conditions within unit area.

No-Action: No direct or indirect impacts would occur to affected fish species or affected fisheries resources beyond those described in Fisheries Existing Conditions. Cumulative effects (other related past and present factors; other future, related actions; and any impacts described in Fisheries Existing Conditions) would continue to occur.

Action Alternative (see Fisheries table below):

Fisheries	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Sediment	X				X				X					
Flow Regimes	X				X				X					
Woody Debris	X				X				X					
Stream Shading	X				X				X					
Stream Temperature	X				X				X					
Connectivity	X				X				X					
Populations	X				X				X					
Action														
Sediment	X				X				X					
Flow Regimes	X				X				X					
Woody Debris	X				X				X					
Stream Shading	X				X				X					
Stream Temperature	X				X				X					
Connectivity	X				X				X					
Populations	X				X				X					

Comments: There does not appear to be any surface water or stream crossings on the state parcel where the permit would be located. No significant impacts identified.

Fisheries Mitigations: None

WILDLIFE:

No-Action: None of the proposed activities would occur. No wildlife habitat would be altered, and no additional disturbance would occur. Thus, no direct, secondary, or cumulative effects to terrestrial wildlife species would be anticipated.

Action Alternative (see Wildlife table below):

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Threatened and Endangered Species														
Grizzly bear *(Ursus arctos)* Habitat: Recovery areas, security from human activity	**X**				**X**				**X**				**Y**	**WI-1**
Lynx (*Felis lynx*) Habitat: SF hab.types, dense sapling, old forest, deep snow zone		**X**				**X**			**X**				**Y**	**WI-2**
Yellow-billed cuckoo (*Coccyzus americanus*) Habitat: open cottonwood riparian forest with dense brush understories (Lake and Flathead counties)	**X**				**X**				**X**					**WI-3**
Sensitive Species														
Bald eagle *(Haliaeetus leucocephalus)* Habitat: Late-successional forest within 1 mile of open water	**X**				**X**				**X**					**WI-3**
Wolverine (*Gulo gulo*) Habitat: high elevation areas that retain high snow levels in late spring	**X**				**X**				**X**					**WI-3**
Black-backed woodpecker *(Picoides arcticus)* Habitat: Mature to old burned or beetle-infested forest	**X**				**X**				**X**					**WI-3**
Common loon *(Gavia immer)* Habitat: Cold mountain lakes, nest in emergent vegetation	**X**				**X**				**X**					**WI-3**
Fisher *(Martes pennanti)*		**X**				**X**			**X**					**WI-4**

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Habitat: Dense mature to old forest less than 6,000 feet in elevation and riparian														
Flammulated owl *(Otus flammeolus)* Habitat: Late-successional ponderosa pine and Douglas-fir forest	**X**					**X**			**X**					**WI-5**
Peregrine falcon *(Falco peregrinus)* Habitat: Cliff features near open foraging areas and/or wetlands	**X**				**X**				**X**					**WI-3**
Pileated woodpecker *(Dryocopus pileatus)* Habitat: Late-successional ponderosa pine and larch-fir forest		**X**				**X**			**X**					**WI-6**
Fringed myotis (*Myotis thysanodes*) Habitat: low elevation ponderosa pine, Douglas-fir and riparian forest with diverse roost sites including outcrops, caves, mines		**X**				**X**				**X**				**WI-7**
Hoary bat (*Lasiurus cinereus*) Habitat: coniferous and deciduous forests and roost on foliage in trees, under bark, in snags, bridges		**X**				**X**			**X**					**WI-8**
Townsend's big-eared bat *(Plecotus townsendii)* Habitat: Caves, caverns, old mines	**X**				**X**				**X**					**WI-3**

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Big Game Species														
Elk	**X**					**X**			**X**				**Y**	**WI-9**
Whitetail	**X**					**X**			**X**				**Y**	**WI-9**
Mule Deer	**X**					**X**			**X**				**Y**	**WI-9**
Moose	**X**					**X**			**X**				**Y**	**WI-9**

Comments:

WI-1. The proposed Project Area occurs outside of grizzly bear Recovery Areas and over 13 miles from the nearest Recovery Zone (USFWS 1993, Wittinger 2002). In addition, there have been no recent observations (within 40 years) of grizzly bear within 10 miles of the Project Area (MTNHP 2023). The activities would not affect preferred bear habitat (e.g. berry patches, riparian areas). Mitigation measures would include contractor firearm restrictions and food storage restrictions. Given the relatively small scale of activity (17 acres) and the likelihood of grizzly bear using this area, negligible adverse direct, secondary, and cumulative effects to grizzly bears associated with this project would be anticipated.

WI-2. The Project Area contains 314 acres of suitable Canada lynx habitat (65.6% of the Project Area). The proposed rock harvest unit would not affect suitable lynx habitat. However, 0.2 miles of an existing skid trail will be reconditioned to access the scree area proposed for excavation, removing approximately 1 acre of suitable lynx habitat (0.3% of the suitable habitat within the Project Area). The proposed action will also utilize 0.8 miles of existing restricted road within the Project Area that is not open to the public for motorized use as part of the rock hauling route. Disturbance associated the sound of vehicles is known to impact the presence of wildlife up to 500 meters (1,640 feet) from a road (Proctor et al. 2019). Thus, potential disturbance to wildlife from the increased traffic on the restricted road is considered to affect an area up to 1,640 feet on either side of the road. Periodic disturbance from increased traffic along the restricted portion of the haul route could impact approximately 291 acres of suitable lynx habitat (92.6% of the available lynx habitat within the Project Area). The haul route continues for another 6.5 miles along an open access road before intersecting Route 200. Although lynx could occasionally be present in the Project Area, there have been no recent lynx observations (within 40 years) within 5 miles of the Project Area (MTNHP 2023). Duration of proposed activities would be year-round, except when the site is inaccessible during winter, and will continue until dimensional rock is no longer present in the pit. Lynx habitat attributes would not be appreciably affected by scree rock pit development; however, should any lynx be in the vicinity they could be temporarily displaced by human activities occurring within the pit. Thus, the potential for adverse direct and secondary effects to lynx would be low and negligible cumulative effects would be anticipated.

WI-3. This species was evaluated, and it was determined that the Project Area lies outside of the normal distribution for the species, and/or suitable habitat was not found to be present.

WI-4. The Project Area contains 279 acres of suitable fisher habitat (58.4% of the Project Area). There have been no recent observations of fisher (within 40 years) in the area surrounding the

Project Area (5 miles) (Krohner 2022, MTNHP 2023). The proposed rock harvest would not affect suitable fisher habitat. However, the access road and periodic disturbance from increased traffic along the restricted portion of the haul route could impact approximately 67 acres of suitable fisher habitat (35.3% of the available suitable fisher habitat in the Project area). The access road would remove approximately 1 acre of suitable fisher habitat (0.4% of the suitable habitat within the Project Area). Thus, considering the small area of activity, and the lack of recent fisher observations, the potential for adverse direct and secondary effects to fishers would be low and negligible cumulative effects would be anticipated.

WI-5. The Project Area contains 164 acres of flammulated owl habitat (34.3% of the Project Area); however, the proposed activities would not directly affect these areas nor any adjacent forest stands. Approximately 50 acres of potential flammulated owl habitat could be impacted by periodic disturbance from increased traffic along the new road and restricted portion of the haul route (30.5% of available habitat); however, continued use of the Project Area would be expected if flammulated owls are present. Thus, the potential for adverse secondary effects to flammulated owls would be low and negligible direct and cumulative effects would be anticipated.

WI-6. The Project Area contains 281 acres of pileated woodpecker habitat (58.8% of the Project Area). The proposed rock harvest would not directly affect these areas, but the proposed access road and scree pit excavation will be located adjacent to suitable pileated woodpecker habitat. Although pileated woodpeckers are generally tolerant of disturbance, periodic disturbance from rock harvesting could temporarily displace individual woodpeckers in the immediate vicinity during active periods. The new access road would remove approximately 1 acre of suitable pileated woodpecker habitat (0.4% of the suitable habitat within the Project Area). Continued use of the Project Area would be expected if pileated woodpeckers are present. Thus, the potential for adverse direct and secondary effects to pileated woodpeckers would be low and negligible cumulative effects would be anticipated.

WI-7. The Project Area contains some large scree fields within stands of Douglas fir and ponderosa pine that could be used by roosting fringed myotis. Harvesting activities would affect 0.6 acres of these areas (approximately 5.7% of existing habitat within Project Area). However roosting bats (should they be present) would be temporarily disturbed by equipment in proximity to rocky areas. No known caves or mines are present. As these sites are not high-congregation areas and disturbance would be temporary, low impacts to fringed myotis would be anticipated. Fringed myotis habitat alteration and potential disturbance would be additive to any ongoing or proposed rock harvesting activities occurring on this parcel or surrounding lands.

WI-8. The project area contains forested habitat that could provide roosting habitat for hoary bats. The proposed access road would remove approximately 1 acre of potential hoary bat habitat (approximately 0.3% of existing habitat within Project Area). Because hoary bats typically roost in trees and snags, roosting bats (should they be present) would be temporarily disturbed by the proposed activities. Potential disturbance would only be expected from June through September, when hoary bats are in Montana. Hoary bats are considered common and widespread throughout Montana, but wind energy and diseases such as white-nosed syndrome

pose threats to their population (Bachen et al 2020). After the conclusion of activities, continued use of the Project Area by hoary bats would be anticipated. Thus, the potential for adverse direct and secondary effects to hoary bats would be low and negligible cumulative effects would be anticipated.

WI-9. The Project Area falls within the distribution of elk, mule deer, moose, and white-tailed deer, where non-winter use by these species is possible. The Project Area also contains elk winter range habitat DFWP (*DFWP 2008*). Hiding and thermal cover would not be appreciably affected by the proposed excavation activities. Rock pit excavation could temporarily displace big game species should any be in the area during active periods. Periodic disturbance from increased traffic along the restricted portion of the haul route could impact approximately 286 acres of hiding cover (80.3% of the available hiding cover in the Project area). Contractors conducting activities would be prohibited from carrying and using firearms behind the gate on the restricted road system. Given the location and timing of the proposed activities and habitat affected, the potential for adverse indirect effects to big game would be low and negligible direct and cumulative effects would occur.

Wildlife Mitigations:

- If a threatened or endangered species is encountered, consult a DNRC biologist and develop additional mitigations that are consistent with the administrative rules for managing threatened and endangered species (ARM 36.11.428 through 36.11.435). Similarly, if undocumented nesting raptors or wolf dens are encountered within ½ mile of the Project Area contact a DNRC biologist.
- Prohibit contractors and purchasers conducting contract operations from carrying firearms while on duty as per ARM 36.11.432(1)(c).
- Contractors will adhere to food storage and sanitation requirements as per ARM 36.11.432(1)(d).
- Public access will be restricted at all times on restricted roads that are opened for activities; signs will be used during active periods and a physical closure (gate, barriers, equipment, etc.) will be used during inactive periods (nights, weekends, etc.).
- To protect resources and protect valuable wildlife habitat, no firewood permits should be issued to Contractors.

Literature:

DFWP. 2008. Maps of moose, elk, mule deer, and white-tailed deer distribution in Montana. In Individual GIS data layers. Available online at: https://gis-mtfwp.opendata.arcgis.com/

Krohner, J. M., Lukacs, P. M., Inman, R., Sauder, J. D., Gude, J. A., Mosby, C., Coltrane, J. A., Mowry, R. A., and J. J. Millspaugh. 2022. Finding fishers: determining fisher occupancy in the Northern Rocky Mountains. The Journal of Wildlife Management, 86(2): 1-20.

Montana Natural Heritage Program (MTNHP). 2023. Environmental Summary Report for Latitude 47.39576 to 47.50278 and Longitude -114.69799 to -114.83374. Retrieved on June 5, 2023, from http://mtnhp.org/MapViewer.

Proctor et. al. 2019. Effects of roads and motorized human access on grizzly bear populations in British Columbia and Alberta, Canada. Ursus 2019 (30e2), 16-39.

USFWS. 1993. Grizzly bear recovery plan. Missoula, Montana. 181 pp.

USFWS and DNRC. 2010. Montana Department of Natural Resources and Conservation Forested Trust Lands Habitat Conservation Plan, Final Environmental Impact Statement, Volumes I and II., U.S. Department of Interior, Fish and Wildlife Service, Region 6, Denver, Colorado and Montana Department of Natural Resources and Conservation, Missoula, MT.

Wittinger, W.T. 2002. Grizzly bear distribution outside of recovery zones. Unpublished memorandum on file at USDA Forest Service, Region 1. Missoula, Montana. 2pp.

AIR QUALITY:

Air Quality	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Smoke	**X**				**X**				**X**					
Dust	**X**				**X**				**X**					
Action														
Smoke	**X**				**X**				**X**					
Dust		**X**				**X**				**X**			**Y**	**AQ-1**

Comments:

AQ-1 Under the action alternative, truck traffic and excavation work would produce more dust than the no action alternative.

Air Quality Mitigations:

• AQ-1 Keep truck speeds down to reduce road dust.

ARCHAEOLOGICAL SITES / AESTHETICS / DEMANDS ON ENVIRONMENTAL RESOURCES:

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Historical or Archaeological Sites	**X**				**X**				**X**					

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Aesthetics	**X**				**X**				**X**					
Demands on Environmental Resources of Land, Water, or Energy	**X**				**X**				**X**					
Action														
Historical or Archaeological Sites	**X**				**X**				**X**					**A-1**
Aesthetics	**X**				**X**				**X**					
Demands on Environmental Resources of Land, Water, or Energy	**X**				**X**				**X**					

Comments:
A-1 A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE) on state School Trust Land. This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that no cultural or paleontological resources have been identified in the APE. Because of extensive ground disturbance throughout the APE, and because the local geology is not likely to produce caves, rock shelters, or sources of tool stone, no additional archaeological investigative work will be conducted. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

Mitigations:

A-1 If previously unknown cultural or paleontological materials are identified during project related activities, all work would cease until a professional assessment of such resources can be made.

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.*

- Middle Henry Rock Permit (2013)
- Upper Henry Rock Permit (2007)
- Rainbow Curve Decorative Stone Permit (1996)
- Clark Hinchwood Rock Permit (2023)

Impacts on the Human Population

Evaluation of the impacts on the proposed action including **direct, secondary, and cumulative** impacts on the Human Population.

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Health and Human Safety	X				X				X					
Industrial, Commercial and Agricultural Activities and Production	X				X				X					
Quantity and Distribution of Employment	X				X				X					
Local Tax Base and Tax Revenues	X				X				X					
Demand for Government Services	X				X				X					
Access To and Quality of Recreational and Wilderness Activities	X				X				X					
Density and Distribution of population and housing	X				X				X					
Social Structures and Mores	X				X				X					
Cultural Uniqueness and Diversity	X				X				X					
Action														
Health and Human Safety	X				X				X					
Industrial, Commercial and Agricultural Activities and Production	X				X				X					
Quantity and Distribution of Employment		X				X				X			N	Q-1
Local Tax Base and Tax Revenues	X				X				X					
Demand for Government Services	X				X				X					
Access To and Quality of	X				X				X					

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Recreational and Wilderness Activities														
Density and Distribution of population and housing	**X**				**X**				**X**					
Social Structures and Mores	**X**				**X**				**X**					
Cultural Uniqueness and Diversity	**X**				**X**									

Comments:
Dimensional stone being excavated and sold would employ landscapers and contractors.

Mitigations: None

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.*

- None

Other Appropriate Social and Economic Circumstances:

Costs, revenues and estimates of return are estimates intended for relative comparison of alternatives. They are not intended to be used as absolute estimates of return. The estimated stumpage is based on comparable sales analysis. This method compares recent sales to find a market value for stumpage. These sales have similar species, quality, average diameter, product mix, terrain, date of sale, distance from mills, road building and logging systems, terms of sale, or anything that could affect a buyer's willingness to pay.

No Action: The No Action alternative would not generate any return to the trust at this time.

Action: The decorative stone permit would generate additional revenue for the Common Schools Trust. The estimated return to the trust for the proposed harvest is $15,000 based on an estimated harvest of an estimated 500 tons and an overall stumpage value of $30 per ton. Costs, revenues, and estimates of return are estimates intended for relative comparison of alternatives, they are not intended to be used as absolute estimates of return.

References

DNRC 1996. State forest land management plan: final environmental impact statement (and appendixes). Montana Department of Natural Resources and Conservation, Forest Management Bureau, Missoula, Montana.

DNRC. 2010. Montana Department of Natural Resources and Conservation Forested State Trust Lands Habitat Conservation Plan: Final EIS, Volume II, Forest Management Bureau, Missoula, Montana.

Does the proposed action involve potential risks or adverse effects that are uncertain but extremely harmful if they were to occur?
No

Does the proposed action have impacts that are individually minor, but cumulatively significant or potentially significant?
No

Environmental Assessment Checklist Prepared By:

Name: Joe Buchanan
Title: Management Forester
Date: October 30, 2023

Finding

Alternative Selected
The Action Alternative is selected for implementation.

Significance of Potential Impacts
No significant impacts were identified.

Need for Further Environmental Analysis

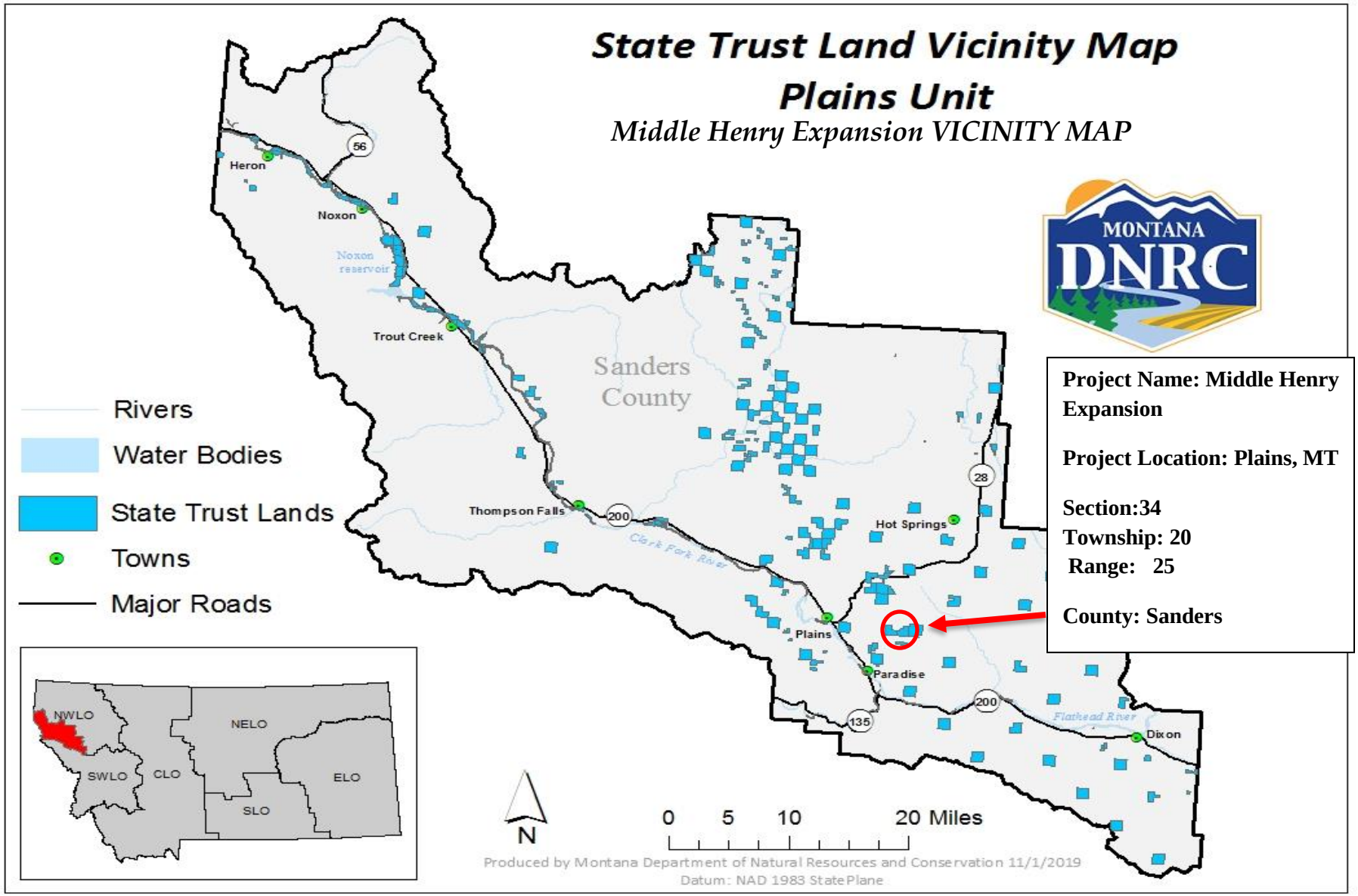
[ ]	EIS	[ ]	More Detailed EA	[X]	No Further Analysis

Environmental Assessment Checklist Approved By:

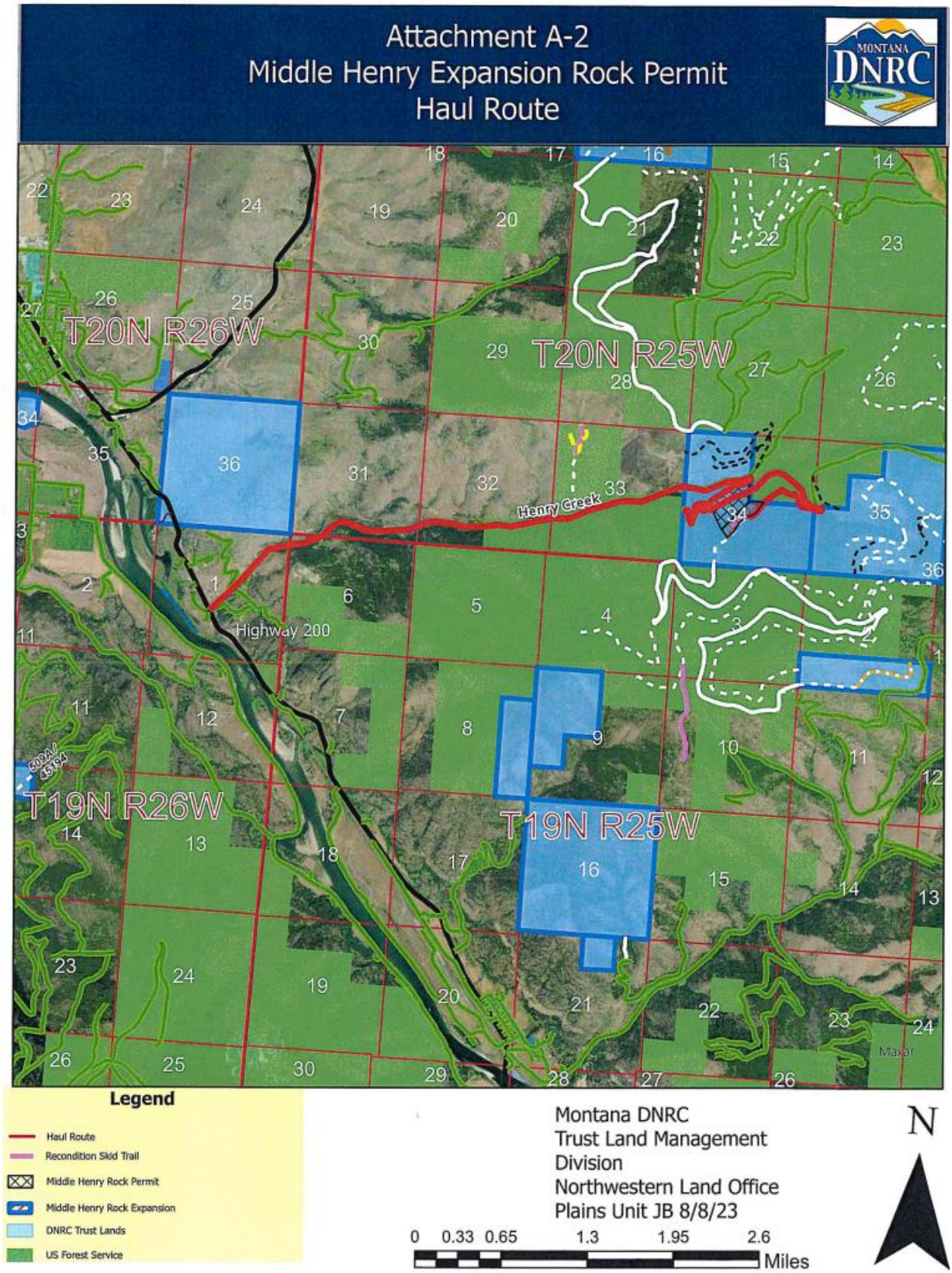
Name: David M. Olsen
Title: Plains Unit Manager
Date: October 30, 2023
Signature: /s/ *David M. Olsen*

Attachment A - Maps

A-1: Timber Sale Vicinity Map



A-2: Rock Permit Haul Route



A-3: Harvest Unit