

Environmental Assessment Checklist

Project Name: Sterling Line Timber Permit

Proposed Implementation Date: June 2020

Proponent: Helena Unit, Central Land Office, Montana DNRC

County: Lewis and Clark

Type and Purpose of Action

Description of Proposed Action:

The Helena Unit of the Montana Department of Natural Resources and Conservation (DNRC) is proposing the Sterling Line Timber Permit. The project is located 5 miles south of Craig Montana (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	T15N R03W Section 36 T14N R2W Sections 6 & 8	~1464	~200
Public Buildings			
MSU 2 nd Grant			
MSU Morrill			
Eastern College-MSU/Western College-U of M			
Montana Tech			
University of Montana			
School for the Deaf and Blind			
Pine Hills School			
Veterans Home			
Public Land Trust			
Acquired Land			

Objectives of the project include:

- Generate Revenue for the trust beneficiaries
- Remove trees impacted by western spruce budworm and mountain pine beetle
- Encourage regeneration
- Reduce wildland fire fuel loading near private property

Proposed activities include:

Action	Quantity
Proposed Harvest Activities	# Acres
Clearcut	
Seed Tree	~50.5
Shelterwood	
Selection	

Action	Quantity
Commercial Thinning	
Salvage	
Overstory Removal	~136
Total Treatment Acres	186.5
Proposed Forest Improvement Treatment	# Acres
Pre-commercial Thinning	Up to 100
Planting	
Proposed Road Activities	# Miles
New permanent road construction	
New temporary road construction	~.5
Road maintenance	~11
Road reconstruction	
Road abandoned	
Road reclaimed	
Other Activities	
Prescribed fire	Up to 200 acres
Noxious weed control	Up to 400 acres

Duration of Activities:	5 Years
Implementation Period:	5 Years

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:
 - 4/15/2020
- PUBLIC SCOPED:
 - The scoping notice was posted on the DNRC Website: <http://dnrc.mt.gov/public-interest/public-notices>
 - Adjacent landowners
- AGENCIES SCOPED:
 - FWP, Tribes within Montana
- COMMENTS RECEIVED:
 - How many: 0

- Concerns: 0
- Results (how were concerns addressed):

DNRC specialists were consulted, including: Ross Baty, Mike Anderson, Patrick Rennie, Jeff Schmalenberg, and Tim Spoelma.

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.*)

- **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 2006). The Group determines the delineation of airsheds and impact zones throughout Idaho and Montana. Airsheds describe those geographical areas that have similar atmospheric conditions, while impact zones describe any area in Montana or Idaho that the Group deems smoke sensitive and/or having an existing air quality problem (Montana/Idaho Airshed Group 2006). As a member of the Airshed Group, DNRC agrees to burn only on days approved for good smoke dispersion as determined by the Smoke Management Unit.

ALTERNATIVES CONSIDERED:

No-Action Alternative: Deferred harvest: Logging and related activities would not occur in the near future, however, grazing and outfitting under existing leases would continue.

Action Alternative: DNRC would harvest up to 500 thousand board feet (MBF) of primarily Douglas-fir trees utilizing seed tree and group selection harvest systems. A combination of cable and mechanized harvest systems would be used. On some steeper slopes less than 45% a combination of a feller buncher and cable based skidding is proposed to limit exposure during skidding operations. Construction of up to .5 miles of road to be put in storage condition at the completion of the harvest. New roads would be closed to public motorized use, and placed into storage condition at the end of harvest activities. Maintenance on existing 11 miles of haul road would occur under the action alternative. Grazing under existing lease would continue but may work with lessee to limit conflict between cattle and timber harvest. All forest improvement work would be dependent on funding.

Impacts on the Physical Environment

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

VEGETATION:

Vegetation Existing Conditions:

Forest cover types consisting of mixed stands of Douglas-fir and Ponderosa Pine are found on 7,996 acres (43%) of an 18,500 acre vegetation analysis area (VAA) northeast of Holter Lake. This area includes 3 parcels of State Trust Land, encompassing 1,464 acres, where timber harvesting is proposed up to 200 acres (14% of the State project area and 1% of the VAA). These parcels include 1,055 (72%) forested acres consisting of mixed stands of Douglas-fir and Ponderosa Pine and 408 (28%) non-forest acres. The age of the stands to be treated is less than 200 years old, thus they do not meet DNRC's criteria to be considered old growth.

Treatments would not alter the amount of forested area or cover types in terms of species composition of the treated stands; however, they would shift the stocking and age class of forest stands. Seed tree cutting treatments on 50.5 acres would reduce the overstory canopy cover to promote regeneration of Douglas-fir and Ponderosa Pine. This treatment would not change the age class of these acres, but sawtimber stocking would change from well to poorly stocked stands, to provide ample sunlight to establish regeneration. Overstory removal treatment on 136 acres of stand previously treated with shelterwood cutting would reduce susceptibility of regenerated stands to spruce budworm and result in a shift from poorly stocked-sawtimber stands to well-stocked seedling/sapling stands. The 186.5 acres treated comprise approximately 2% of the forested portion of the VAA. Treatments would reduce the susceptibility of stands to attacks/infestation by the Mountain Pine Beetle and Western Spruce Budworm. Further description of the existing conditions and expected effects of the proposed action can be found in the vegetation analysis in the project file.

Noxious weeds (primarily spotted knapweed, Canada thistle, and hound's tongue) exist in lower Bray Gulch along the access route. The land owner and DNRC have an active spraying program in that area to control weeds. With any activity, and with no action, there is the potential for the spread of noxious weeds to new areas. The potential for timber harvest actions to add to this potential are reduced by washing equipment prior to entry to the harvest areas. DNRC would monitor and apply herbicide treatment if necessary pre- harvest and for a period of three years post-harvest.

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														
Noxious Weeds	x				x				x					
Rare Plants	x				x				x					
Vegetative community	x				x				x					
Old Growth	x				x				x					
Action														
Noxious Weeds		x				x				x			Yes	1
Rare Plants		x				x				x			Yes	3
Vegetative community		x				x				x			Yes	2
Old Growth	x				x				x					

Comments:

1. *Disturbed sites from equipment operation, timber removal and pile burning are receptive seed beds for noxious weeds.*
2. The removal of up to 500 MBF of timber and temporarily disturbing grasses and forbs present on site.
3. The age classes of leave trees on would be in the 120-130-year-old age class. Regeneration would take place in the forest openings created would lower the average age of the stand once regeneration is established.
4. PP-DF forest cover types would remain on the site.
5. Harvest would consist of 5 individual units of 2-136 acres in size. Portions of the harvest units have not been harvested before and would be treated with a seed tree harvest while others have been treated with a shelterwood cut previously and would have an overstory removal harvest.

Vegetation Mitigations:

- A minimum of one snag and one snag recruit per acre, of the largest diameter class, would be retained. Cull live trees and cull snags would be retained where possible given human safety considerations.
- Retain live, healthy older trees and stand attributes suitable for old growth development where available and applicable. Retain leave trees in a clumped distribution where possible.
- All logging equipment would be power washed and free of soil and organic material prior to being brought on site.
- Pre-harvest and post-harvest herbicide applications would be made to manage noxious weeds in the sale area. All herbicide applications would follow label instructions. Treatments may continue for up to 5 years after pile burning is concluded depending on amount of noxious weed infestation.
- Grass seed disturbed sites (landings, slash piles, major skid trails) at the completion of each harvest unit. Seed mix used would be appropriate for site applied.

SOIL DISTURBANCE AND PRODUCTIVITY:

Soil Disturbance and Productivity Existing Conditions:

The project area is within a semi-arid precipitation zone (18-24") though the probability of high intensity rain events are significant. There are no especially unusual or unique geologic features in the proposed harvest area. No slope instabilities were noted during field review.

The soil forest productivity in the project area is low and limited by low precipitation and very high and low seasonal temperatures. Coarse woody debris volumes were ocularly assessed at 5-10 tons per acre.

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			Yes	1
Erosion		x				x				x			Yes	2
Nutrient Cycling		x				x				x			Yes	3
Slope Stability	x				x				x				N/A	
Soil Productivity		x				x				x			Yes	1

Comments:

- 1) Monitoring of DNRC timber harvest shows the level of total detrimental soil impacts averages 6.2% of a harvest area using cable harvest systems and 13.2% for traditional ground-based operations (DNRC 2011). Detrimental soil impacts are considered substantive when they exceed 20 percent of a harvest area (DNRC 1996). Soil productivity is expected to be maintained when soil function is maintained within 80% of a harvest unit.
- 2) Standard implementation of forest management BMP's to control erosion concurrent with harvest activities would mitigate any erosion concerns in the project area. Primary or highly impacted skid trails would be reclaimed as needed, covered with slash and debris using water bars only as needed to provide adequate drainage so to not expose infertile subsoils.
- 3) Slash greater than 3" in diameter would be left at a rate of 10-15 tons an acre within the harvest units where feasible. Retain 1-2 large diameter logs per acre to facilitate moisture retention and creation of micro growing sites.

Soil Mitigations:

- Ground based equipment operations limited to slopes less than 45% with cable harvest systems employed on slopes greater than 45%.
- On slopes 35-45% a feller buncher may be used in combination with cable harvest systems to reduce steeper slope ground based skidding and limit risk of hand falling.
- Limiting season of use to periods when soils are relatively dry (less than 20% soil moisture, oven dried weight), frozen or snow covered to minimize soil compaction and maintain drainage features.
- Minimizing ground scarification to the extent needed to meet silvicultural objectives.
- Forest Officer and Purchaser would agree to a general skidding plan prior to equipment operations and designate skid trails within complex areas.
- Road drainage would be improved on existing and reconstructed roads with new construction complying with Forest Management BMP's.

WATER QUALITY AND QUANTITY:

Water Quality and Quantity Existing Conditions: The project area is entirely within the Missouri River –

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			Yes	1
Water Quantity	x				x				x					2

Comments:

1. Due to the harvest system utilized, location of harvest units relative to stream channels, magnitude of new road construction, no new road stream crossings, no RMZ harvest, implementation of Forest Management BMP's and the low precipitation within the project area there is a low risk of direct, secondary or cumulative water quality impacts.
2. Forest stands are not likely to be a major influence on the hydrology and flow regimes of the streams draining the proposed timber sale area. Many of the trees in the proposed harvest units have been affected by spruce budworm or mountain pine beetle. The proposed harvest is not expected to substantially decrease the levels of canopy interception or evapotranspiration potential over that likely to occur in these watersheds under no action. The levels of harvest proposed are also well below those cumulative levels associated with detrimental increases in water yield. Due to these factors, no direct, secondary or cumulative impacts to water quantity are anticipated under the proposed action.

Water Quality & Quantity Mitigations:

- All new road construction would be managed as restricted. All existing roads would continue to be managed as restricted.
- Best Management Practices for Forestry would be implemented and monitored for effectiveness concurrent with all forest management activities.
- Ephemeral draw crossings would be kept to a minimum and skidding down topographic convergences (draw bottoms) would be prohibited.
- Major skid trails would be grass seeded, closed with slash and debris and/or barriers, reclaimed where necessary and adequate drainage provided.
- Implementation of Montana Administrative Rules for Forest Management, conservation strategies contained in Streamside Management Zone laws.

WILDLIFE:

Dry, sparsely forested foothill habitats commonly found along the Missouri River comprise the majority of the land area in the project area. Topography and aspect in this area are highly variable and many areas are steep and rocky. Forest stringers and patches in the project area are dominated by ponderosa pine and Douglas-fir, and they are naturally fragmented due to past disturbances and rugged terrain. Habitats in the project area and surrounding lands are primarily comprised of grass and shrub communities interspersed with stringers of Douglas-fir and ponderosa pine forest. Holter Lake and the Missouri River lie approximately 3 miles southwest of the project area, which provide aquatic and shoreline habitats for many species of wildlife including shorebirds, ducks, geese, elk, mule deer, white-tailed deer, pheasants, black bears, coyotes, bobcats, etc. Upland forest and grassland habitats also provide habitat during all seasons for elk, mule deer and white-tailed

deer. Grasslands also provide habitat for upland game birds and passerine ground-nesting species, whereas forested patches provide habitat for forest dwelling birds and mammals including those that use downed logs and snags to meet life requisites. Approximately 884 acres of forest lands of varied age and density occur within the 1,464-acre project area (60%). Treatments would not alter the amount of forested area in terms of species composition of the treated stands, however, they would shift the stocking and age class of forest stands. Seed tree cutting treatments on 50.5 acres would reduce the overstory canopy cover to promote regeneration of Douglas-fir and Ponderosa Pine. This treatment would not change the age class of these acres, but stocking of mature forest patches would change from “well” to “poorly” stocked. Overstory removal treatment on 136 acres of stands previously treated with shelterwood cutting would reduce susceptibility of regenerated stands to spruce budworm and result in a shift from poorly stocked-sawtimber stands to well-stocked seedling/sapling stands.

Following harvest, species that prefer more open forest conditions and/or young forest conditions would benefit, whereas those preferring more dense and structurally diverse forest conditions would not benefit. Under the proposed action, some habitat patches could become more fragmented, which would cause little added impact given the conditions already present in this naturally fragmented landscape. Lands within the project area are not within any known area of importance for wildlife habitat linkage. Due to the size, habitat conditions, location and relatively short duration of the project (approximately 1 to 2 years), direct, indirect, and cumulative effects to affected wildlife resources in this area are expected to be minor.

No-Action: Under the no action alternative, none of the proposed vegetation treatments would occur. Thus, no direct, indirect or cumulative effects to habitat and associated wildlife species would be expected as a result of the proposed activities.

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			Yes	1
Canada lynx (Felix lynx) Habitat: Subalpine fir habitat types, dense sapling, old forest, deep snow zone	X				X				X				NA	2
Wolverine (Gulo gulo)	X				X				X				NA	2
Sensitive Species														
Bald eagle (Haliaeetus leucocephalus)	X				X				X				NA	2

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Habitat: Late-successional forest within 1 mile of open water														
Black-backed woodpecker <i>(Picoides arcticus)</i> Habitat: Mature to old burned or beetle-infested forest	X				X				X				NA	2
Black-tailed prairie dog <i>(Cynomys ludoviscianus)</i> Habitat: grasslands, short-grass prairie, sagebrush semi-desert	X				X				X				NA	2
Flammulated owl <i>(Otus flammeolus)</i> Habitat: Late-successional ponderosa pine and Douglas-fir forest		X				X				X			Yes	3
Harlequin duck <i>(Histrionicus histrionicus)</i> Habitat: White-water streams, boulder and cobble substrates	X				X				X				NA	2
Northern bog lemming <i>(Synaptomys borealis)</i> Habitat: Sphagnum meadows, bogs, fens with thick moss mats	X				X				X				NA	2
Mountain plover <i>(Charadrius montanus)</i> Habitat: short-grass prairie & prairie dog towns	X				X				X				NA	2
Peregrine falcon <i>(Falco peregrinus)</i> Habitat: Cliff features near open	X				X				X				NA	2

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
foraging areas and/or wetlands														
Pileated woodpecker <i>(Dryocopus pileatus)</i> Habitat: Late-successional ponderosa pine and larch-fir forest	X				X				X				NA	2
Greater Sage grouse <i>(Centrocercus urophasianus)</i> Habitat: sagebrush semi-desert	X				X				X				NA	2
Townsend's big-eared bat <i>(Plecotus townsendii)</i> Habitat: Caves, caverns, old mines	X				X				X				NA	4
Big Game Species														
Elk		X				X				X			NA	5
Whitetail		X				X				X			NA	5
Mule Deer		X				X				X			NA	5
Other														

Comments:

1. The proposed project area lies approximately 22 miles southeast of the grizzly bear Northern Continental Divide Ecosystem and approximately 17 miles from the Non-Recovery Occupied Habitat boundary line for grizzly bears as defined by Wittinger et al. (2002). Grizzly bears could potentially travel through the project area. The project area overall possesses relatively dry habitats with relatively low greenness values. Given the size and location of cover patches affected and removed, cover would be diminished on up to 200 acres. Many submerchantable patches of trees and inaccessible patches would be retained in portions of harvest units and outside of harvest units. Up to 0.5 miles of new, permanent restricted road would be constructed to access the harvest units and facilitate control of weeds. This road would be made impassible following completion of the proposed activities. During periods of active logging, grizzly bears could be temporarily displaced by the disturbance if they happen to be in the local area. Thus, some short-term risk associated with disturbance, and some long-term, albeit minor risk, to grizzly bears could occur given the reduction in cover and short-term disturbance on the landscape. Given the scope and scale of the proposed activities, and relatively marginal inherent habitat quality for grizzly bears present in the project area, adverse direct, indirect and cumulative impacts to grizzly bears as a result of this project are expected to be low.

2. This project area is either out of the range of the normal distribution for this species or suitable habitat is not present. Thus, no direct, secondary, or cumulative effects would be anticipated.
3. Flammulated owl habitat is potentially present in the project area. Flammulated owls prefer open habitat conditions and would likely be minimally affected by proposed logging activity on south-facing slopes. Some displacement of owls could occur during active logging operations if they are present in affected stands. At least one large snag and one large snag recruitment tree per acre would be retained to provide for potential nesting habitat structure. Given the limited amount of habitat that could be affected and the owl's preference for open stand conditions, minor adverse direct, indirect and cumulative effects to flammulated owls would be anticipated.
4. High quality foraging and roosting habitat for numerous species of bats occurs in numerous places along the Missouri River Corridor. Hoary bats and spotted bats have been identified along the Missouri River near the project area (MNHP Data May 8, 2020). No mines, caves, or rock outcrops occur in the project area or close vicinity that would be suitable for use by Townsend's big-eared bats or other notable species such as hoary bats or spotted bats. Thus, no direct, indirect, or cumulative effects would be anticipated.
5. The project area provides suitable habitat for deer and elk. Under the proposed action, approximately 200 acres of mature forest would have tree density and associated crown cover reduced by logging, which could influence use of the project area by big game for 4 to 5 decades. Many submerchantable patches of trees and inaccessible patches would be retained in portions of harvest units and outside of harvest units. Up to 0.5 miles of new, permanent restricted road would be constructed to access the harvest units and facilitate control of weeds. Following completion of the proposed activities this new restricted road would be made impassible to minimize loss of security for deer and elk. During periods of active logging, elk and deer could be temporarily displaced by the disturbance if they happen to be in the local area. Thus, some short-term risk associated with disturbance, and some long-term, albeit minor risk, to elk and deer could occur given the reduction in cover. Given the location, size and type of the proposed activity, and cover attributes found on the project area, low adverse direct, indirect and cumulative effects to deer and elk associated with cover removal on these habitats would be anticipated.

Wildlife Mitigations:

- A DNRC biologist would be consulted if a threatened or endangered species is encountered to determine if additional mitigations that are consistent with the administrative rules for managing threatened and endangered species (ARM 36.11.428 through 36.11.435) are needed.
- Contractors and purchasers conducting contract operations would be prohibited from carrying firearms while on duty.
- Food, garbage, and other attractants would be stored in a bear-resistant manner.
- A minimum of one snag and one snag recruitment tree per acre, of the largest diameter class, would be retained. Cull live trees and cull snags would be retained where possible given human safety considerations.
- Retain at least one large log >15-inch diameter and >20 feet long (or of the largest diameter available) per acre.

- Following project work, existing and new restricted roads would remain closed to motorized public access.

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			Yes	1
Dust		x				x				x			Yes	2

Comments:

- Tree limbs and tops and other vegetative debris in the harvest areas would be piled throughout the project area during harvesting. Harvest areas may have prescribed fire applied to encourage regeneration. Slash would ultimately be burned after harvesting operations have been completed. Prescribed burning and slash burning would introduce particulate matter into the local airshed, temporarily affecting local air quality. Over 70% of emissions emitted from prescribed burning is less than 2.5 microns (National Ambient Air Quality PM 2.5). High, short-term levels of PM 2.5 may be hazardous. Within the typical column of biomass burning, the chemical toxics are: Formaldehyde, Acrolein, Acetaldehyde, 1,4 Butadiene, and Polycyclic Organic Matter.
- Harvesting and hauling logs could create dust, which may affect local air quality. However, because dust would be localized to skid trails and haul roads and operating seasons would be short in duration, effects to air quality as a result of dust generated during harvest activities are expected to be low.

Air Quality Mitigations: Burning within the project area would be short in duration and would be conducted when conditions favor good to excellent ventilation and smoke dispersion as determined by the Montana Department of Environmental Quality and the Montana/Idaho Airshed Group. DNRC, as a member of the Montana/Idaho Airshed Group, would burn only on approved days.

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					
Aesthetics	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		
Demands on Environmental Resources of Land, Water, or Energy	x				x				x					
Action														
Historical or Archaeological Sites	x				x				x					1
Aesthetics	x				x				x					
Demands on Environmental Resources of Land, Water, or Energy	x				x				x					

Comments:

1. A Class III cultural and paleontological resources inventory was conducted of the area of potential effect on state land. Despite a detailed examination, no cultural or fossil resources were identified and no additional archaeological or paleontological investigative work is recommended. The proposed project will have *No Effect* to *Antiquities* as defined under the Montana State Antiquities Act. A formal report of findings has been prepared and is on file with the DNRC and the Montana State Historic Preservation Officer. 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: If an unanticipated cultural resource is discovered, all project related activities would cease until the resource can be adequately evaluated.

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.*

- SFLMP and the HCP

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					

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		
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					
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					

Comments: N/A

Mitigations: N/A

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.*

- Forest Grazing License

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 timber harvest would generate revenue for the Common School and. The estimated return to the trust for the proposed harvest is \$19375.00 based on an estimated harvest 500MBF and an overall stumpage value of \$2.50 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. An additional \$11392 would be generated for forest improvement activities.

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.
- DNRC, 2011. DNRC compiled soils monitoring report on timber harvest projects, 2006-2010. Department of Natural Resources and Conservation, Forest Management Bureau, Missoula, MT.

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: Devin Healy
Title: Helena Unit Forester
Date: 05/13/2020

Finding

Alternative Selected

The action alternative to harvest up to 500 thousand board feet (MBF) of timber from approximately 200 acres of State Trust Land.

Significance of Potential Impacts

No substantial or unacceptable, detrimental impact to water, soil, fisheries or T & E or Sensitive Species are anticipated as a result of the proposed action.

The proposed timber sale complies with the following:

The State Forest Land Management Plan (DNRC 1996)
Administrative Rules for Forest Management (ARM 36.11.401 through 471)
All other applicable state and federal laws

Need for Further Environmental Analysis

☐

EIS

☐

More Detailed EA

☒

No Further Analysis

Environmental Assessment Checklist Approved By:

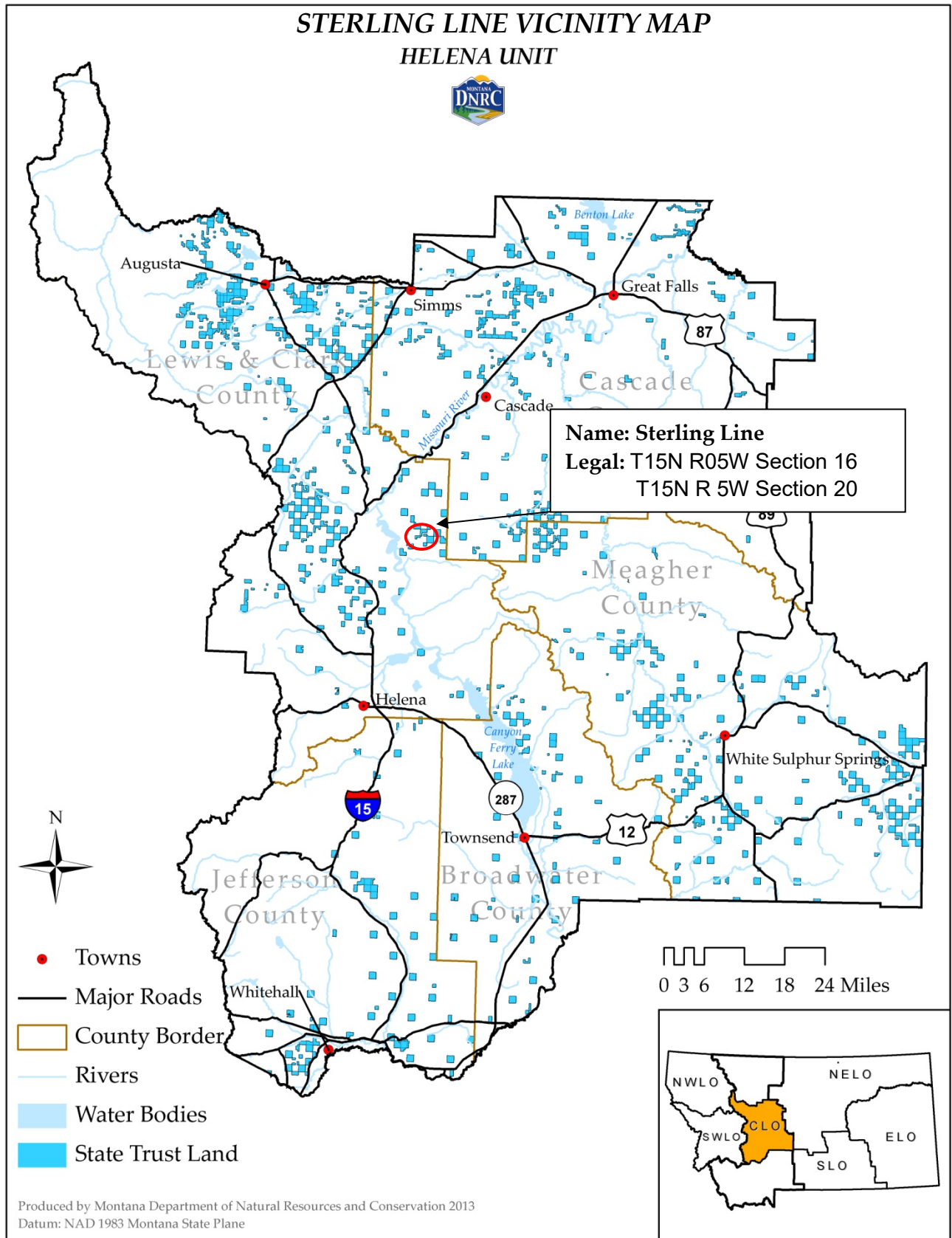
Name: Heidi Crum
Title: Helena Unit Manager
Date: 05/14/2020



Signature:

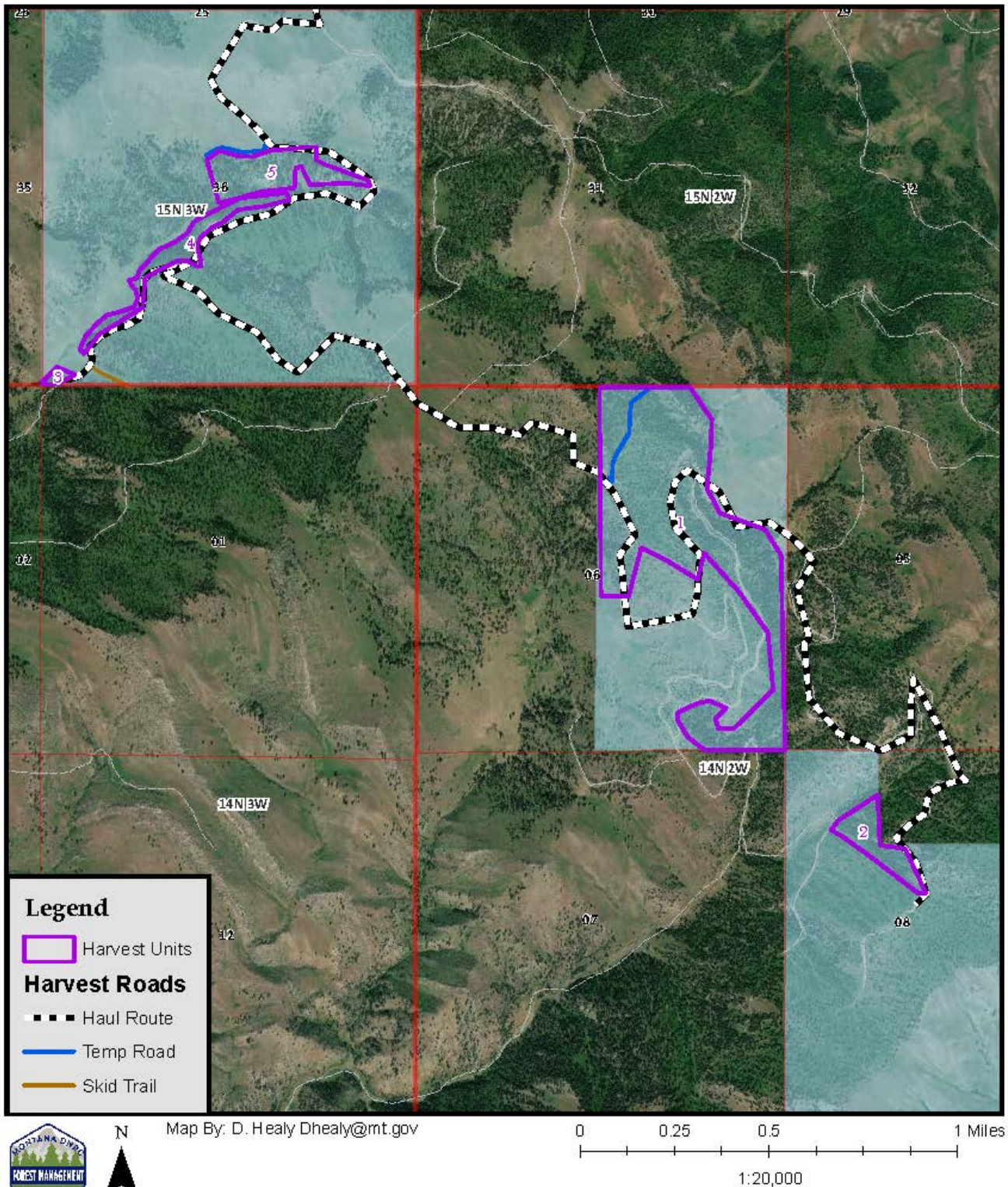
Attachment A - Maps

A-1: Timber Permit Vicinity Map



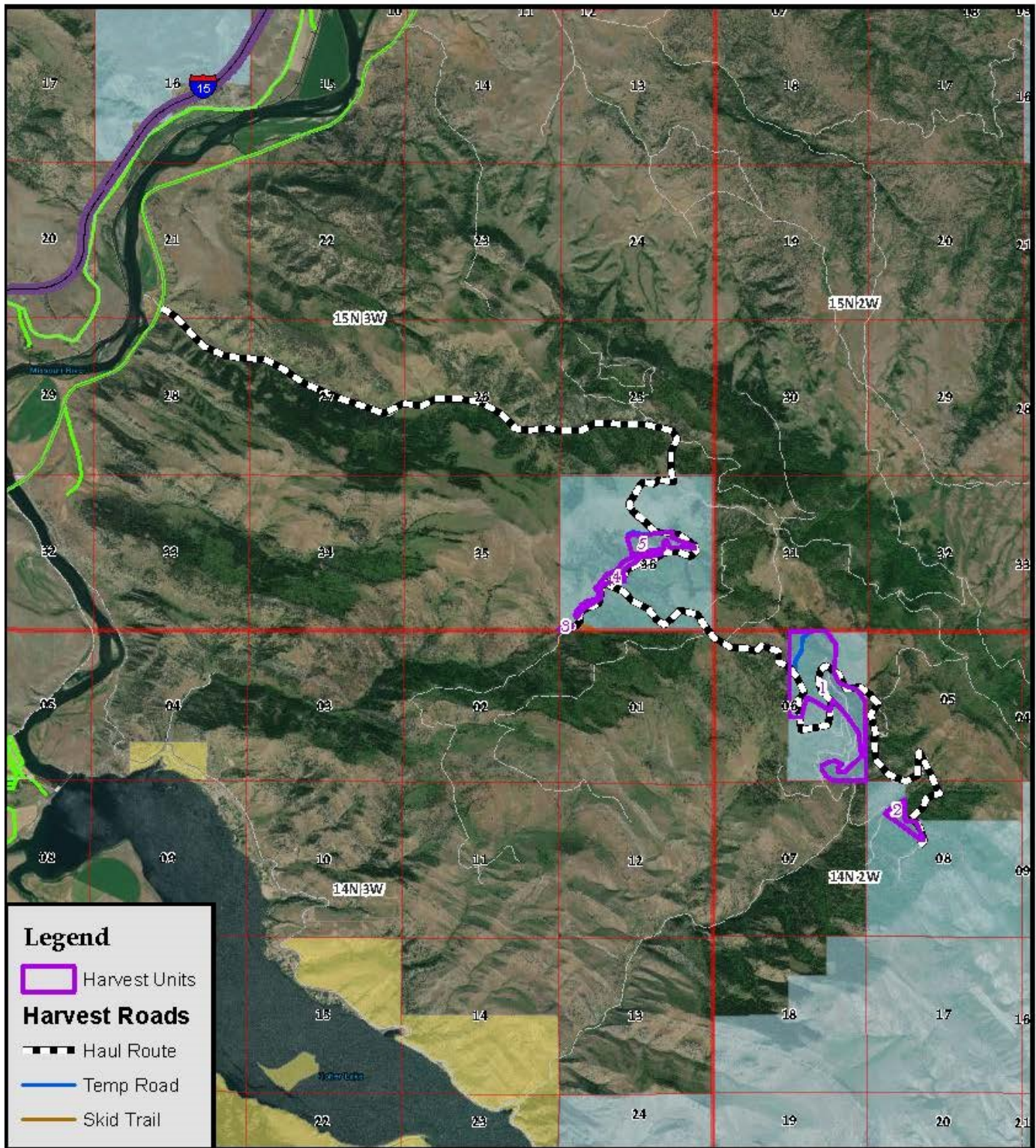
A-2: Timber Permit Harvest Units

Sterling Line Timber Permit
Harvest Unit Map



A-2: Timber Permit Haul Route

Sterling Line Timber Permit
Harvest Unit Map



Map By: D. Healy Dhealy@mt.gov

0 0.5 1 2 Miles
1:50,000

