

Project Development

SCOPING:

- DATE:
 - March 3, 2018- March 30, 2018
- PUBLIC SCOPED:
 - The scoping notice was posted on the DNRC Website: <http://dnrc.mt.gov/public-interest/public-notice>
 - Adjacent landowners, statewide scoping list, newspapers, user groups, posted on DNRC website
- AGENCIES SCOPED:
 - MT DNRC Archeologist, Patrick Rennie
 - Montana FWP Wildlife Biologist, Montana Sage Grouse Habitat Conservation Program
- COMMENTS RECEIVED:
 - Montana FWP and the MT Sage Grouse Program (Program) commented.
 - Concerns: The Sage Grouse Program recommends efforts to conduct field operations after July 15 to be consistent with the executive order. The two-main concerns of the Program are weed management to control noxious weeds and invasive plants including cheatgrass and Japanese brome. The second concern is to limit disturbance of nesting sage grouse.
 - Results (how were concerns addressed): Ground disturbance by hand crews during the conifer removal operations would be minimal. Once operations are completed monitoring of the site for cheatgrass and Japanese brome will be done for the next three years. If the invasive grasses are found they will be sprayed with herbicide.

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:

- **No other government permits are required for this proposal.**

ALTERNATIVES CONSIDERED:

No Action Alternative – Under the No Action Alternative, the DNRC would not authorize MT FWP, to implement conifer encroachment activities on State Trust Lands. Treatments designed to improve moose and mule deer winter range would not be implemented at this time.

Proposed Action Alternative – Under the Action Alternative, DNRC would allow the MT FWP, to implement conifer encroachment removal activities on State Trust Lands. Conifer encroachment removal on approximately 223 acres would occur within and up to 150 feet from existing mahogany stands. The majority of conifers would be lopped and scattered, while approximately 25% of conifers would be used whole or in larger pieces as a browse barrier to promote regeneration of mountain mahogany.

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:

The conifer encroachment in the project area was mapped using a combination of aerial photography and site inspections. The mountain mahogany stand is dominated by mahogany with scattered conifers. In the proposed treatment area, MT FWP and DNRC identified approximately 223 acres of encroachment in mountain mahogany for treatment.

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													
Rare Plants	x													
Vegetative community	x					x				x			No	1.
Action														
Noxious Weeds	x				x				x					
Rare Plants	x				x				x				Yes	2.
Vegetative community		x				x				x			Yes	3.

Comments:

- Under the No Action Alternative, conifer encroachment would continue into mountain mahogany dominated vegetation community types. As no activities would occur or be possible under this alternative, no mitigations would be possible to reduce this occurrence.
- A data query was conducted by the Montana Natural Heritage Program (MNHP) for the project (January 2018) to identify possible endangered, threatened and sensitive plants in the proposed treatment area. *Pinus albicaulis* (Whitebark Pine), *Agastache* (Cusick's Horesmint), *Primula alcalina* (Alkali Primrose), *Carex idaho* (Idaho Sedge), and *Stipa lettermanii* (Lettermans's Needlegrass) are all classified as a species of concern and have potential to be found in the area. *Stanleya viridiflora* (Green Prince's plume) is identified as a potential species of concern. No other sensitive, endangered or threatened species of plants were found to be in the area.
- Under the Action Alternative beneficial effects to native plant communities in the area would be expected from conifer removal treatments.

SOIL DISTURBANCE AND PRODUCTIVITY:

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			
Water Quantity	x				x				x						2.

Comments:

1. No Action Alternative, there would be no new impacts to water quality or quantity.
2. Given the project requirements, measurable direct, indirect and cumulative negative impacts to water quality and water resources would not be expected.

FISHERIES:

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						1.
Flow Regimes	x				x				x						1.
Woody Debris	x				x				x						1.
Stream Shading	x				x				x						1.
Stream Temperature	x				x				x						1.
Connectivity	x				x				x						1.
Populations	x				x				x						1.
Action															
Sediment	x				x				x						2.
Flow Regimes	x				x				x						2.
Woody Debris	x				x				x						2.
Stream Shading	x				x				x						2.
Stream Temperature	x				x				x						2.
Connectivity	x				x				x						2.
Populations	x				x				x						2.

Comments:

1. No Action Alternative, there would be no new impacts to the fisheries.
2. Given the project requirements, measurable direct, indirect and cumulative negative impacts to fisheries would not be expected.

WILDLIFE:

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Species of Concern														
Pygmy Rabbit <i>(Brachylagus idahoensis)</i> Habitat: Big sagebrush and suitable soils for burrowing	x					x				x			Yes	1.
Little Brown Myotis <i>(Myotis lucifugus)</i> Habitat: Variety of habitats across a large elevation gradient	x				x				x				Yes	2.
Wolverine <i>(Gulo gulo)</i> Habitat: Alpine tundra, and boreal and mountain forests	x				x				x				Yes	3.
Great Blue Heron <i>(Ardea herodias)</i> Habitat: Major rivers and lakes	x				x				x				Yes	4.
Clark's Nutcracker <i>(Nucifraga columbiana)</i> Habitat: Mature to old burned or beetle-infested forest	x				x				x				Yes	5.
Westslope Cutthroat Trout <i>(Oncorhynchus clarkia lewisi)</i> Habitat: Cold, gravely, pool and cover dominated streams	x				x				x				Yes	6.
Brewer's Sparrow <i>(Spizella breweri)</i> Habitat: Shrubsteppe habitats dominated by sagebrush	x					x				x			Yes	7.
Golden Eagle <i>(Aquila chrysaetos)</i>	x				x				x				Yes	8.

Wildlife	Impact												Can Impact be Mitigated?	Comment Number	
	Direct				Secondary				Cumulative						
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High			
Habitat: Cliffs and large trees and hunt over prairie and open woodlands															
Green-tailed Towhee (<i>Pipilo chlorurus</i>) Habitat: Sagebrush and other shrub communities	x					x					x			Yes	9.
Veery (<i>Catharus fuscescens</i>) Habitat: Willow thickets and cottonwoods along water bodies	x					x					x			Yes	10.
Long-billed Curlew (<i>Numenius americanus</i>) Habitat: Prairie and meadow habitats with mixed grasses and moist soils	x					x					x			Yes	11.
Peregrine falcon (<i>Falco peregrinus</i>) Habitat: Cliff features near open foraging areas and/or wetlands	x				x					x					
Pileated woodpecker (<i>Dryocopus pileatus</i>) Habitat: Late-successional ponderosa pine and larch-fir forest	x				x					x					
Greater Sage grouse (<i>Centrocercus urophasianus</i>) Habitat: sagebrush semi-desert	x					x					x			Yes	12.
Townsend's big-eared bat (<i>Plecotus townsendii</i>) Habitat: Caves, caverns, old mines	x				x					x					

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			Yes	13.
Whitetail		x				x				x			Yes	13.
Mule Deer		x				x				x			Yes	13.
Other		x				x				x			Yes	13.

Comments:

1. Pygmy Rabbit – The project area lies within a mile of a confirmed breeding area for the species. Habitats in Montana include shrub-grasslands on alluvial fans, floodplains, plateaus, high mountain valleys, and mountain slopes, where suitable sagebrush cover and soils for burrowing are available.” By removing encroaching conifers from the mountain mahogany communities, the positive impact on the rabbit is greater than the negative impact. There is no negative impact expected.

2. Little Brown Myotis – The project area lies within a confirmed area of occupancy of the Little Brown Myotis. The species is found in a wide range of habitats across a large elevation gradient and is found to feed over bodies of water. The activities of this project are not expected to have a negative impact.

3. Wolverine – The project area falls within 6 miles of confirmed occupancy of wolverines, the Woverine is a species of concern. However, high elevation peaks and basins that possess late persistent snowpack in spring are not present in the project area. Given that preferred denning habitat for wolverines would not be treated under the proposed action, no direct, indirect, or cumulative effects to wolverines would be anticipated.

4. Great Blue Heron – The project area lies within 2 miles of a confirmed nesting area for the species. The primary habitat in Montana for the species is major rivers and lakes with nesting taking place in mainly the largest cottonwoods in the area. By removing encroaching conifers from the mountain mahogany communities there is no negative impact expected.

5. Clark’s Nutcracker – The project area is in the range of the species but is not expected to have any impact because the Clark’s Nutcracker’s preferred habitat is conifer forests that are dominated by whitebark pine and limber pine at higher elevations. This project calls for the removal of Douglas-fir and juniper in the mountain mahogany community. There is no negative impact expected to the species.

6. Westslope Cutthroat Trout – The project area is within a mile of confirmed Westslope Cutthroat Trout habitat. The primary habitat for the species is cold, nutrient poor, gravel substrate in riffles and pool crests. By removing encroaching conifers from the mountain mohogany communities there will be no negative impact expected.

7. Brewer's Sparrow – The project area is within one mile of a confirmed Brewer's Sparrows breeding area. The sparrow typically inhabits shrubsteppe habitats dominated by sagebrush with nest averaging 16 inches high in sage brush. By removing encroaching conifers from the mountain mahogany communities, the positive impact on the sparrow is greater than the negative impact. There is no negative impact expected.

8. Golden Eagle – The project area is within three miles of a confirmed nesting area of the Golden Eagle. The eagle typically inhabits cliffs and in large trees (occasionally on power poles) for nesting, and hunt over prairie and open woodlands. By removing encroaching conifers from the mountain mahogany communities there will be no negative impact expected.

9. Green-tailed Towhee – The project area is within one mile of a confirmed breeding area of the Green-tailed Towhee. The species “typically occurs along the ecotone, or edge, of sagebrush communities and other mixed-species shrub communities such as Chokecherry, snowberry, serviceberry, and mountain mahogany” (Dobbs et al. 2012). By removing encroaching conifers from the mountain mahogany communities, the positive impact on the sparrow is greater than the negative impact. There is no negative impact expected.

10. Veery – The project area lies within a mile of confirmed occupancy of the species. “In Montana, Veerys are often associated with willow thickets and cottonwood along streams and lakes in valleys and lower mountain canyons.” By removing encroaching conifers from the deciduous communities, the positive impact on the Veery is greater than the negative impact. There is no negative impact expected

11. Long-billed Curlew – The project area lies within 3 miles of a confirmed breeding area of the Curlew. The habitat associated with the species is in prairie and meadow habitats with mixed grasses and moist soils. By removing encroaching conifers from the mahogany communities there will be no negative impact expected.

12. Greater Sage Grouse – Conifer encroachment has been identified as a considerable threat to sage grouse conservation (80 FR 59858, October 2, 2015), and reducing the prevalence of rangeland-invading trees has been identified as an important objective for this region of Montana. The project is based on the expansion of Douglas-fir and Rocky Mountain juniper into historical sagebrush habitats. Approximately 223 acres of state trust lands proposed for treatment would temporarily (several decades) reduce the abundance and prevalence of Douglas-fir and juniper that is beginning to invade sagebrush rangelands in the area providing a longer-term cumulative benefit to the abundance and availability of sage grouse habitat.

13. Other Terrestrial and Avian Wildlife Species – Vegetation communities on the project area likely provide suitable habitat for numerous other terrestrial and avian wildlife species. Such species would likely include elk, deer, forest carnivores, small mammals, prairie and forest associated neotropical migrant birds, raptors, black bears, etc. Treatments could remove vegetative cover usable by some species, and during treatments, motorized disturbance

treatment associated with conifer removal could disturb and displace wildlife in the area for up to two months.

Linkage, Corridors, and Habitat Connectivity – The project area is focused on edge habitat situated along a forest-grassland ecotone and in stands of mountain mahogany. As such, forest cover is patchy and likely occurred in a patchy fashion under historical conditions. The project area does not occur within any known linkage zones or corridors important for maintaining connectivity of populations or migration routes. However, the potential for both short and long-term fragmentation and loss of mahogany, rangeland and sagebrush habitat would be reduced, providing benefits for associated species such as sage grouse.

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					1
Dust		x			x				x					1

Comments:

1. Under the Action Alternative, there would be limited dust impact due to vehicle travel to and from the project areas. The impacts would be low to the air quality and pose no risks.

OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

No other known environmental documents or federal actions are being examined within the project area.

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					1
Aesthetics	X				X				X					
Demands on Environmental Resources of Land, Water, or Energy	X				X				X					
Action														
Historical or Archaeological Sites	X				X				X					2
Aesthetics		X				X				X				3
Demands on Environmental Resources of Land, Water, or Energy	X				X				X					

Comments:

1. The project area is semi-arid, sagebrush covered steppe/foothills, and the topography is characteristically steep to moderately steep. Cultural and paleontologic resources within the project APEs will persist indefinitely in the rather dry and stable environment.
2. A Class I level review was conducted by the DNRC staff archaeologist for the areas of potential effect (APE) on state land. This entailed inspection of project maps, geologic maps, the DNRC's TLMS database, and General Land Office Survey Plats. The Class I search revealed that a few cultural resources have been identified in, or near, the APEs. Further, Class III level inventories have covered less than 20% of the APEs. The cultural resources identified consist of both historic and precontract items. Precontract items are limited to thin scatterings of chipped stone debitage, low-profile cairns, and tipi ring-size stone circles. Historic cultural resources consist of roads/trails and building remnants.

In general, the terrain within the state land portions of the APEs is steep (40+ percent slopes). Additionally, there are a lack of springs and a lack of geology that would suggest caves, rock shelters, or sources of tool stone. Because neither cultural nor paleontologic resources density is expected to be high on the state-owned portions of the APEs, 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.

The proposed action consists of lopping young Douglas fir in localities where immature trees are typically spaced several feet or yards apart. This will entail one or more individuals using chainsaws, and walking from tree to tree. Trees will be cut near ground level and left to deteriorate in-place. This form of treatment has no potential to physically or visually impact any kind of cultural or paleontologic resource.

- Conifer removal would alter existing vegetation and have a minor, temporary effect for up to several decades on the visual appearance of the affected lands and associated landscape. Treatments would appear natural and would likely be almost non-discernable to most casual observers. Minor expected changes would be cumulative to other natural and man-caused disturbances across the landscape over time.

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					

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			
Cultural Uniqueness and Diversity	x				x				x						
Action															
Health and Human Safety		x				x				x				Yes	1.
Industrial, Commercial and Agricultural Activities and Production	x				x				x						2.
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						3.
Density and Distribution of population and housing	x				x				x						
Social Structures and Mores	x				x				x						4.
Cultural Uniqueness and Diversity	x				x				x						

Comments:

1. Proposed tree slashing activities would require adequate safety measures to be in place to ensure the safety of workers. Safety requirements complying with OSHA standards and federal and state safety regulations would be required for all sawing operations.

2. The proposed treatments that would be conducted using project funding would not be expected to alter any existing traditional agricultural or ranching uses on the project area or surrounding lands.

3. Conifer removal along forest fringe areas would alter existing vegetation and have a minor, temporary effect for up to several decades on the visual appearance of the affected lands and associated landscape. Treatments along the forest-grassland ecotone would appear natural and would likely be almost non-discernable to most casual observers. Minor expected changes would be cumulative to other natural and man-caused disturbances across the landscape over time.

4. The proposed treatments that would be conducted using NRCS funding would not be expected to disturb or alter any native or traditional lifestyles or communities.

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: Don Copple and Jackson Spooner
Title: Dillon Unit FMO & Senior Engine Boss
Date: May 2018**

Finding

Alternative Selected

Proposed Action Alternative – Under the Action Alternative, DNRC would allow the MT FWP, to implement conifer encroachment removal activities on State Trust Lands. Conifer encroachment removal on approximately 223 acres would occur within and up to 150 feet from existing mahogany stands. The majority of conifers would be lopped and scattered, while approximately 25% of conifers would be used whole or in larger pieces as a browse barrier to promote regeneration of mountain mahogany.

Significance of Potential Impacts

Upon review of the project and analysis herein, I find that none of the impacts are severe, enduring, geographically widespread, or frequent. Further, I find that the quantity and quality of the natural resources, including any that may be considered unique or fragile, will not be adversely affected to a significant degree. I find no precedent for the future actions that would cause significant impacts, and I find no conflict with local, State, or federal laws, requirements, or formal plans.

Need for Further Environmental Analysis

EIS

More Detailed EA

No Further Analysis

Environmental Assessment Checklist Approved By:

Name: Timothy Egan

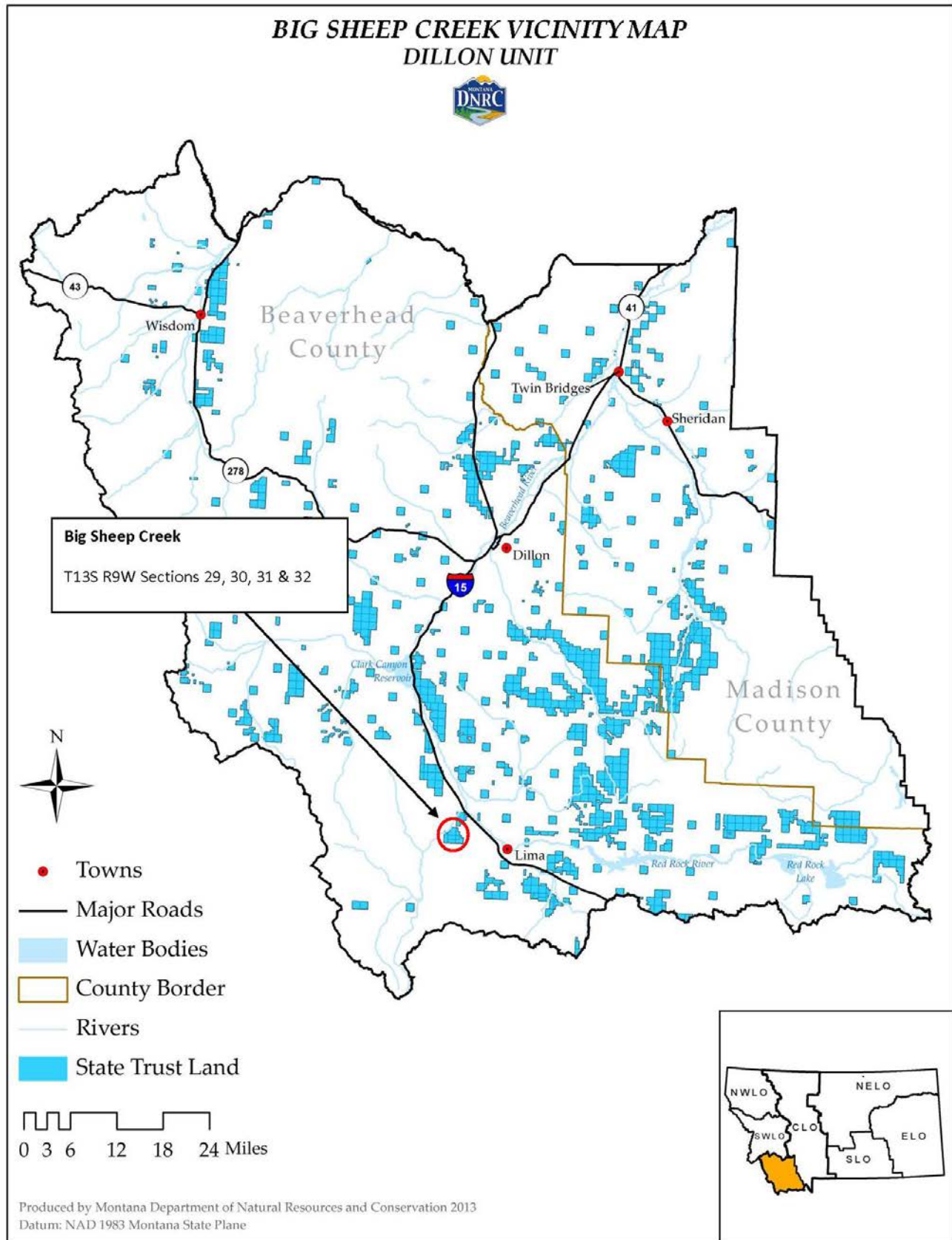
Title: Dillon Unit Manager

Date: June 5, 2018

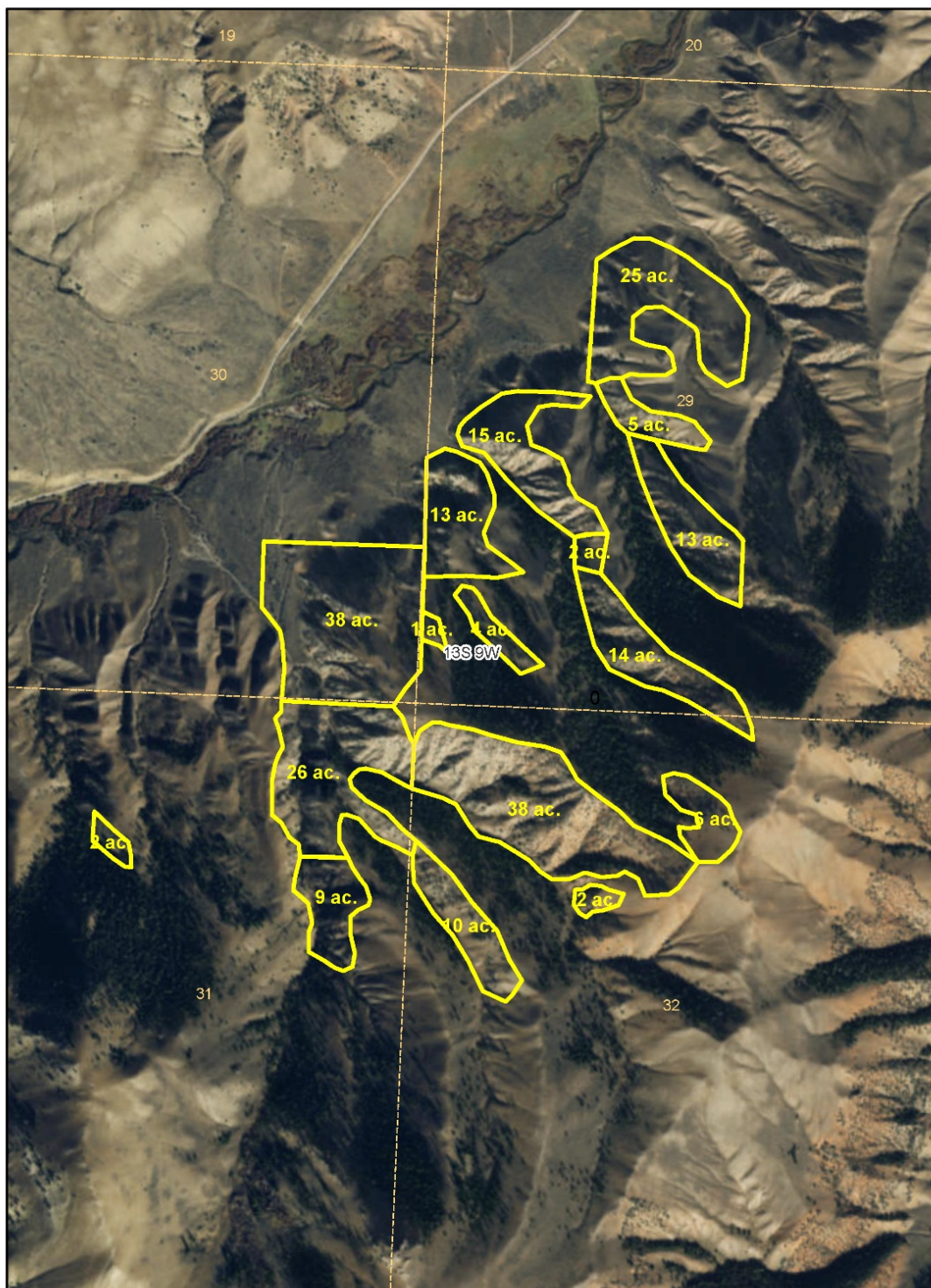
Signature: /s/ Timothy Egan

Attachment A - Maps

Project Maps



Big Sheep Creek - Montana FWP Project
T13S, R9W, Sections 29, 30, 31 & 32
MT FW&P



0.2 0.1 0 0.2 Miles

12/20/2017 DC