

Environmental Assessment Checklist

Project Name: Idaho Creek/Jack Creek Conifer Encroachment Treatment

Proposed Implementation Date: Spring 2018

Proponent: Dillon Unit, Central Land Office, Montana DNRC

County: Madison

Type and Purpose of Action

Description of Proposed Action:

The Dillon Unit of the Montana Department of Natural Resources and Conservation (DNRC) has received habitat improvement requests from Montana Fish, Wildlife and Parks (MTFWP) and The Nature Conservancy (TNC) for the Idaho Creek and Jack Creek areas (Sections 28, 29, 32, 33, T7S, R4W and Section 4, T8S, R4W). The project will benefit primarily sage grouse habitat by removing scattered Rocky Mountain juniper and Douglas-fir from sagebrush-grassland habitat. The Nature Conservancy has further proposed beaver mimicry in the project area in conjunction with the conifer removal project. TNC has secured the funding for the watershed project and MTFWP is still waiting to secure funds for the conifer removal. This project could begin as early as the summer of 2018 and could take up to 5 years to complete. Some of the proposed work would be completed by TNC employees, MTFWP employees, DNRC Fire Crew, and willing volunteers.

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 southwest Montana.

Objectives of the Project:

- Removal of low density conifers that are encroaching into sage brush habitat across several identified areas in Southwest Montana. Conifers to be removed include Douglas-fir, Rocky Mountain juniper, and limber pine.

The project is based on the expansion of Douglas-fir and Rocky Mountain juniper into historical sagebrush habitats. Conifer encroachment is considered a significant factor in lek extirpation due to conifers providing subsidy to common terrestrial and avian predators of sage grouse. The goal of this project is to prevent juniper and Douglas-fir from invading and degrading core sage grouse habitat. Sage grouse nest habitat use has been documented to diminish at 3% infestation by conifers. The principal citation supporting this work is Severson et al. 2017.

Severson, J.P., Hagen, C.A., Maestas, J.D., Naugle, D.E., Forbes, J.T. and Reese, K.P., 2017. Effects of conifer expansion on greater sage-grouse nesting habitat selection. *The Journal of Wildlife Management*, 81(1), 86-95.

- Implementation of beaver mimicry dams in reaches of Idaho Creek and Jack Creek. Beaver mimicry dams can allow for rapidly improving native aquatic species, raise ground water/allow for subirrigation, restore/maintain channel slope and adjacent floodplains, restore sediment and bedload storage capability within riparian areas treated, reduce sediment input into downstream impaired waters, store water throughout the summer months, allow ecosystems to adapt to the effects of climate change and riparian habitat would improve within the watershed.

Chadwick, Amy., 2018. Beaver Mimicry in Montana: Example Techniques, Early Benefits, and Lessons learned. https://youtu.be/J_MzOVN8wgM

Duration of Activities:

The initiation of project-related activities would begin in the summer of 2018. Treatments may continue up to November 2022 depending on individual project funding.

Project Development

SCOPING AND PUBLIC INVOLVEMENT:

- 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-notices>
 - 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
 - Natural Resources Conservation Service (NRCS)

SUMMARY OF COMMENTS RECEIVED:

In accordance with the Montana Environmental Policy Act, public concerns about the project and potential environmental impacts must be considered and analyzed prior to making the decision of whether to allow permission for this proposal to be approved.

Comments were received from Fisheries Biologist, Matthew Yeager, Montana Fish, Wildlife and Parks. Matt asked that we analyze beaver mimicry and mechanical methods of stream restoration. The TNC along with other private and government agencies have seen great success with the use of beaver mimicry dams throughout Southwestern Montana. Beaver mimicry dams can allow for rapidly improving native aquatic species, raise ground water/allow for subirrigation, restore/maintain channel slope and adjacent floodplains, restore sediment and bedload storage capability within riparian areas treated, reduce sediment input into downstream

impaired waters, store water throughout the summer months, allow ecosystems to adapt to the effects of climate change and riparian habitat would improve within the watershed. Mechanical methods would be cost prohibitive.

Sean Claffey, Dillon Field office-BLM, Hydrologist (2018).

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:

During development of this project two distinct alternatives were considered, which include the Proposed Action Alternative and the No Action Alternative.

No Action Alternative – Under the No Action Alternative, the DNRC would not authorize the TNC to implement conifer encroachment removal activities on State Trust Lands.

Proposed Action Alternative – Under the Action Alternative, DNRC would allow the TNC to implement conifer encroachment removal activities on State Trust Lands. Conifers would be removed with chainsaws (lop and scatter). Trees will be cut near ground level and left to deteriorate in-place.

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. Phase 1 encroachment class is dominated by sagebrush with scattered conifers. In the proposed treatment area, Montana FWP and Montana DNRC identified approximately 471 acres of Phase 1 encroachment that was on the state sections.

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			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 sagebrush/grassland 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 (December 19, 2017) to identify possible endangered, threatened and sensitive plants in the proposed treatment area. *Pinus albicaulis* (Whitebark Pine) is classified as a species of concern and has potential to be found in the area; however that species is uncommon to the proposed treatment area. 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:

The NRCS soil survey of the project (Idaho Creek & Jack Creek) shows 8 different soil types in the project area. The Idaho Creek area is made up of primarily (Amesha, bedrock substratum-Musselshell complex), (Blackhall-Rock outcrop complex), (Crago-Scravo complex), (Hanson-Adel complex), (Kalsted sandy loam), (Leavitt stony loam) and (Musselshell-Amesha, bedrock substratum complex). The Jack Creek area is made up of primarily (Blackhall-Rock outcrop complex), (Hanson channery loam), (Kalsted sandy loam), (Leavitt stony loam) and (Musselshell-Amesha, bedrock substratum complex).

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					1
Erosion	x				x				x					1
Nutrient Cycling	x				x				x					1
Slope Stability	x				x				x					1
Soil Productivity	x				x				x					1
Action														
Physical Disturbance (Compaction and Displacement)	x				x				x					2
Erosion	x				x				x					2
Nutrient Cycling	x				x				x					2
Slope Stability	x				x				x					2
Soil Productivity	x				x				x					2

Comments:

1. No Action Alternative, there would be no activities to allow any impact to soil productivity or soil disturbance.
2. Action Alternative, would allow for the removal of conifers using chainsaws (lop and scatter). No negative effects on the soil productivity or soil disturbance are expected with this alternative.

WATER QUALITY AND QUANTITY:

Idaho Creek and Jack Creek flow through portions of the proposed project areas.

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					1.
Water Quantity	x				x				x					1.
Action														
Water Quality		x			x					x				2.
Water Quantity	x				x				x					2.

Comments:

1. No Action Alternative, there would be no new impacts to water quality or quantity.
2. Conifer encroachment in the SMZ will be removed to improve deciduous plants in the riparian areas. Given the project requirements, there is a very low likelihood of direct, indirect and cumulative negative impacts to water quality and water resources in the project area.

FISHERIES:

Idaho Creek and Jack Creek flow through portions of the proposed project areas.

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. Conifer encroachment in the SMZ would be removed to improve deciduous plants in the riparian area. Given the project requirements, there is a very low likelihood of direct, indirect and cumulative negative impacts to fisheries in the project area.

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														
Grizzly bear <i>(Ursus arctos)</i> Habitat: Recovery areas, security from human activity	x				x				x				Yes	1.
Canada lynx <i>(Felix lynx)</i> Habitat: Subalpine fir habitat types, dense sapling, old forest, deep snow zone	x				x				x					
Wolverine <i>(Gulo gulo)</i> Habitat: Alpine tundra, and boreal and mountain forests	x				x				x				Yes	2.
Bald eagle <i>(Haliaeetus leucocephalus)</i> Habitat: Late-successional forest within 1 mile of open water	x				x				x				Yes	3.
Black-backed woodpecker <i>(Picoides arcticus)</i> Habitat: Mature to old burned or beetle-infested forest	x				x				x					
Westslope Cutthroat Trout <i>(Oncorhynchus clarkia lewisi)</i> Habitat: Cold, gravelly, pool and	x					x				x			Yes	4.

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Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
cover dominated streams														
Brewer's Sparrow (<i>Spizella breweri</i>) Habitat: Shrubsteppe habitats dominated by sagebrush	x				x				x					
Gray Wolf (<i>Canis lupus</i>) Habitat: Ample big game populations, security from human activities	x				x				x					
Western Pearlshell (<i>Margaritifera falcata</i>) Habitat: Cold, Low to moderate gradient, sand or gravel substrates streams	x				x				x					
Ferruginous Hawk (<i>Buteo regalis</i>) Habitat: Sagebrush steppe	x					x				x			Yes	5.
Mountain plover (<i>Charadrius montanus</i>) Habitat: short-grass prairie & prairie dog towns	x				x				x					
Peregrine falcon (<i>Falco peregrinus</i>) Habitat: Cliff features near open foraging areas and/or wetlands	x				x				x					
Hoary Bat (<i>Lasiurus cinereus</i>) Habitat: forested areas, feed over water	x				x				x					
Greater Sage grouse (<i>Centrocercus urophasianus</i>) Habitat: sagebrush semi-desert	x					x				x			Yes	6.

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Wildlife	Impact												Can Impact be Mitigated?	Comment Number	
	Direct				Secondary				Cumulative						
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High			
Townsend's big-eared bat <i>(Plecotus townsendii)</i> Habitat: Caves, caverns, old mines	x				x				x						
Big Game Species															
Elk		x				x				x				Yes	7.
Whitetail		x				x				x				Yes	7.
Mule Deer		x				x				x				Yes	7.
Other		x				x				x				Yes	7.

Comments:

1. Grizzly Bear – The project area lies approximately 5 miles from the nearest recovery zone (Greater Yellowstone Ecosystem), however it is possible that a grizzly bear could occasionally wander through the vicinity of the project area. No new roads would be constructed as a part of this proposed action. Short-term and temporary disturbance activities that effect grizzly bears, should one be in the area, would primarily be associated with noise disturbance from chainsaws and vehicle traffic while slashing conifers. Given: 1) the relatively low likelihood that a bear would be found in this area; 2) the limited scope, scale and duration of the proposed activities; and 3) the relatively low value of the habitats that would be affected for grizzly bear foraging; any potential direct, indirect, or cumulative effects to grizzly bears or their habitat would be minor.

2. Wolverine – The project area falls within the distribution of wolverines in Montana. 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.

3. Bald Eagle – The project areas for Idaho Creek and Jack Creek are within five miles of confirmed nesting areas for the Bald Eagle. The eagle is not expected to be affected because it uses tall, large diameter and mature trees to nest and the project activity calls for the removal of juniper and doug fir which are not typical nesting locations for Bald Eagles. The relatively low likelihood that a Bald Eagle nest is found in the area all activities will be postponed until an alternative action is found that will not harm the eagle’s habitat.

4. Westslope Cutthroat Trout – The project areas for Idaho Creek and Jack Creek are in confirmed Westslope Cutthroat Trout habitat. The proposed activities would have no negative effects on the species but would allow for more water flow in the streams due to the removal of conifers in the stream corridor.

5. Ferruginous Hawk – The Jack Creek project area is within a mile of known nesting grounds for the Ferruginous Hawk. The hawk typically inhabits “mixed-grass prairie, shrub-grasslands, grasslands, grass-sagebrush complex, and sagebrush steppe”, with nest being both off the ground and on the ground. The activities in the proposed project should not have a negative effect on the hawk. However if a Ferruginous Hawk nest is found all activities will be postponed until an alternative action is found that will not harm the hawk’s habitat.

- Ferruginous Hawk — *Buteo regalis*. *Montana Field Guide*. Montana Natural Heritage Program and Montana Fish, Wildlife and Parks. Retrieved on December 29, 2017, from <http://FieldGuide.mt.gov/speciesDetail.aspx?elcode=ABNKC19120>

6. 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. Proposed treatments would be planned and implemented in a coordinated fashion with conifer removal efforts on nearby state land and private lands. The positive effect of treating the state land would be greater, given the treatments will be conducted concurrently with work conducted on other cooperating ownerships across the larger landscape. The project is based on the expansion of Douglas-fir and Rocky Mountain juniper into historical sagebrush habitats. The primary objectives of the treatments are to: 1) remove encroaching conifers from Phase 1 density class areas to maintain the acreage of healthy sagebrush-rangeland communities for sage grouse, and reduce the presence of potential perch sites for avian predators near known leks; 2) force back conifer seed walls near sagebrush community types for maintenance and reduce the source of conifer seed and its abundance in sagebrush/grassland areas. In the overall proposed treatment area, approximately 471 acres of conifer encroachment was identified as Phase 1 density, (See attached maps – Jack Creek & Idaho Creek). Removal of young conifers using chainsaws across approximately 471 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.

7. 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. Generally, species associated with native rangeland and sagebrush habitats would benefit, whereas species more associated with coniferous forest for meeting life requisites would not benefit. Given the types of proposed treatments, the acreage that would be treated, and the duration of activities could occur (approximately five years starting spring 2018), minor adverse direct, indirect and cumulative effects to resident species would be expected.

Linkage, Corridors, and Habitat Connectivity – The project area is focused on edge habitat situated along a forest-grassland ecotone. 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 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					1.
Dust	x				x				x					1.
Action														
Smoke		x			x				x					2.
Dust		x			x				x					2.

Comments:

1. No Action Alternative, there would be no impact to the air quality.
2. Action Alternative, there would be limited smoke and 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:

The project area is semi-arid, sagebrush covered steppe/foothills, and the topography is characteristically steep to moderately steep.

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														

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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			
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. 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. Precontact 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.
2. 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 treatment involves the lopping of 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.

Because no cultural or paleontologic site has been identified on private land within the APEs, proposed conifer encroachment treatments will not impact these resources.

3. 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.

References Cited:

Connor, Melissa A. and Kenneth P. Cannon 1991. Forest Fires as a Site Formation Process in the Rocky Mountains of Northwestern Wyoming. *Archaeology in Montana* Vol 32(2): Pp. 1-14.

Picha, Paul , Stanley A. Ahler, Rodney D. Sayler, and Robert W. Seabloom. 1991. Effects of Prairie Fire on Selected Artifact Classes. *Archaeology in Montana* Vol 32(2): Pp. 15-28.

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					

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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			
Social Structures and Mores	x				x				x						
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 TNC, to implement conifer encroachment removal activities on State Trust Lands.

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. In summary, I find that adverse impacts would be avoided, controlled, or mitigated by the design and implementation of the project to an extent that they are not significant.

Need for Further Environmental Analysis

EIS

More Detailed EA

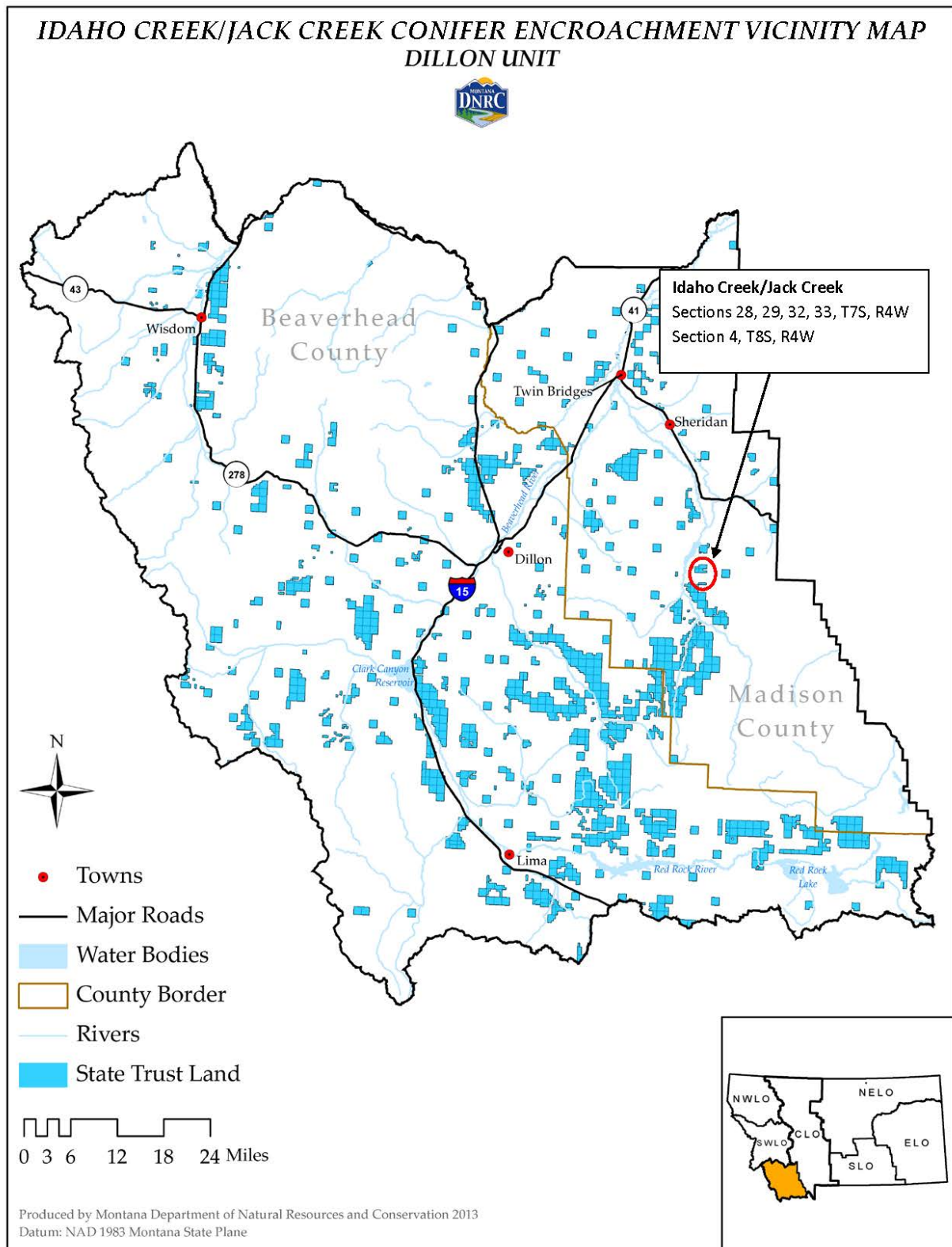
No Further Analysis

Environmental Assessment Checklist Approved By:

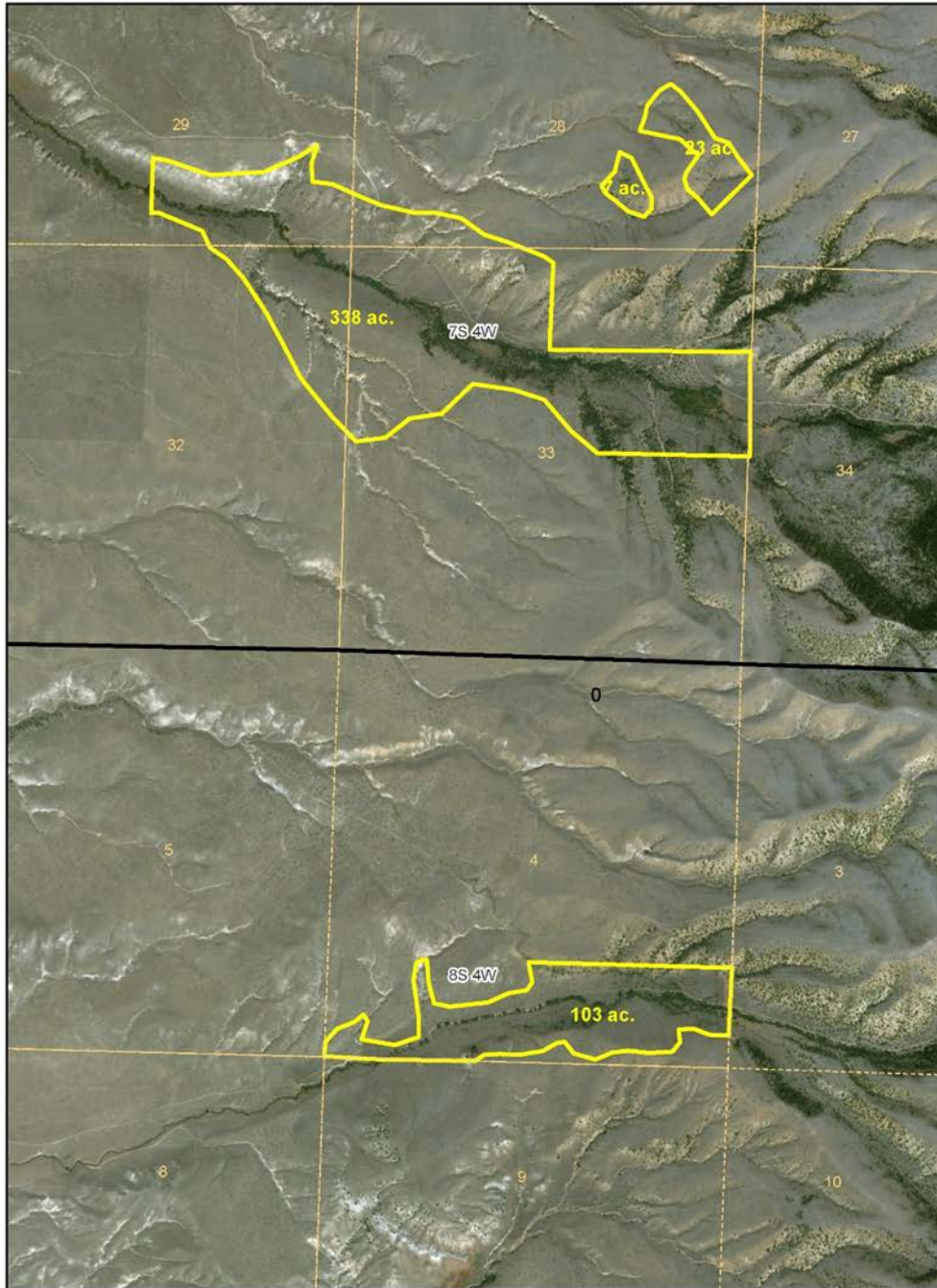
Name: Timothy Egan
Title: Dillon Unit Manager
Date: June 11, 2018
Signature: /s/ Timothy Egan

Attachment A - Maps

Project Maps



Idaho & Jack Creeks - Encroachment Project
T7S, R4W, Sections 28, 29, 32 & 33 T8S, R4W, Section 4
MT FW&P and Nature Conser.



12/20/2017 DC