CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	GRLA Alternative Practice
Proposed Implementation Date:	October 2014
Proponent:	US Forest Service—Custer Gallatin NF, Beartooth Ranger District Red Lodge MT, C/O Amy Waring
Location:	T7S R18E Sec 1, 2, 11, 12
County:	Carbon Co.

I. TYPE AND PURPOSE OF ACTION

Amy Waring, Team Lead for the GRLA project located on the Beartooth Ranger District of the Custer Gallatin National Forest has requested Streamside Management Zone (SMZ) Alternative Practices (AP) for multiple units in the Red Lodge Creek Area shown on the map as units 5F, 6F, 8F, 9F, 22F and 23T. Each unit will be reviewed individually below but work in the units would include potential broadcast burning within the SMZ, removal and thinning of non-merchantable conifer trees (no clearcutting in the SMZ has been proposed). Work is proposed around multiple bodies of water including class 1 streams and wetland areas.

From USFS Request 6/19/2014:

Alternative Practices Waiver: The Forest Service will seek an alternative practices waiver on up to 33 acres for hand thinning and broadcast burning within SMZs. Units 5f, 6f, 9f, 21f, 22f, 8t, 23t, 4f, 8f, 28f, 29f, 30f, 31f may include hand thinning or reaching in with mechanized equipment (no driving) with lopping and scattering of slash. Units 8t, 23t, 4f, 8f, 28f, 29f, 30f, 31f may also be broadcast burned

Units 5f, 6f, 9f, 21f, 22f are grasslands and wet meadows that are being colonized by spruce and to a lesser extent lodgepole. These units contain SMZs totaling about 17 acres across the five units. Treatment is proposed to maintain grasslands/wet meadows (i.e. non-forest). The proposed prescription specifically targets removal of all conifers less than 8" dbh, and would thin conifers greater than 8" dbh to two trees per acre, which would not meet SMZ requirements for tree retention. Selective tree cutting in riparian areas may occur by hand or by reaching into the riparian area with mechanized equipment (no driving), and scattering the slash. An alternative practices waiver would be required for this treatment.

Units 4f, 8f, 28f, 29f, 30f, 31f are grasslands being colonized by Douglas-fir. They contain scattered limber pine and ponderosa pine that are declining in health. Broadcast burning is proposed to maintain grasslands with scattered limber and ponderosa pine (i.e. non-forest). These units contain SMZs totaling about 14.5 acres across all six units. Hand thinning or reaching in with mechanized equipment with lopping and scattering of slash is proposed within the SMZ. Thinning would be according to the overall unit prescription to within five feet of the high water mark. Piling/burning would not be allowed within 50 feet of the high water mark. Broadcast burning in the SMZ would be avoided (no active lighting unless necessary for control measures to cleanup fuel pockets). Fire would be allowed to creep into the SMZ and self-extinguish or be mopped up when convenient. An alternative practices waiver would be required for this treatment.

Unit 8t is a proposed 20 acre clearcut under Alternative 2 only. Unit 23t is a proposed 63 acre combination unit that includes about 36 acres of clearcut and 27 acres of thinning. The purpose of the clearcuts is to provide for age class diversity in lodgepole pine. The purpose of the thinning is to reduce fire and beetle hazard. Both treatments would also provide for pure and mixed aspen of various age classes. Unit 8t includes about a .35 acre SMZ, and unit 23t includes about a 1.4 acre SMZ. Broadcast burning is proposed in the clearcut areas to prepare the site for natural regeneration. SMZs may be thinned, but would not be clearcut. Thinning would be by hand or by reaching in with mechanized equipment. Broadcast burning in the SMZ would be avoided (no active lighting unless necessary for control measures to cleanup fuel pockets). Fire would be allowed to creep into the SMZ and self-extinguish or be mopped up when convenient.

All other SMZ requirements would be met. Broadcast burning would occur within the SMZ and retention of trees in the SMZ would not meet and removal of conifers would leave a stand with different size and species characteristics than the pre-harvest stand.
A request for an AP has been received by the Montana DNRC Southern Land Office. This is to analyze the potential effects to determine if no significant impacts would occur from the proposed AP.

II. PROJECT DEVELOPMENT

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

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

Public scoping by DNRC was not completed for this EA Checklist. On 6/1/2014 SLO Forester Brad Shoemaker met with USFS project team lead Amy Waring and Andy Efta, hydrologist on site to visit and review each unit individually. A follow up meeting on 6/17/2014 with SLO Forester Brad Shoemaker and Andy Efta was also conducted on site to visit all remaining units that were not field verified on 6/1/2014.

Public Scoping was completed by the USFS on a project-wide scale. A summary of public involvement from the Draft EIS, published April 2014 is below:

Public Involvement:

The Beartooth District provided information to the public and asked for comments in 2012 and 2013, and provided numerous opportunities for public input as the proposed action and alternatives were developed. In 2012, the District scoped a preliminary purpose/need and general proposed action (i.e. unit boundaries identified, but treatments not assigned). As a result, the purpose and need was refined and clarified, and comments were considered as the proposed action was developed.
In 2013, the District scoped a detailed purpose and need and proposed action, and received about 36 comments. As alternatives to the proposed action were developed, the District held additional field trips and reviewed draft alternatives with the public to provide information, discuss issues of concern, provide an opportunity for the public to interact with resource specialists, and provide an additional opportunity for people to provide comments on the alternatives before they were finalized. Throughout this process, the district also met with local government and interest groups to share information. These efforts are bulleted below. Greater Red Lodge Vegetation and Habitat Management Project 1.10

2012

- June 14, 2012 - Pre-Scoping Letter with preliminary purpose and need and general proposed action mailed to over 300 individuals/groups/agencies
- June 15, 2012 - Press release

- June 21, 2012 – Press release printed in Carbon County News (CCN)
- June 28, 2012 - Public meeting in Red Lodge
- June 28, 2012 – Public field trip in Red Lodge Creek
- June 25, 2012 – Met with Billings Gazette
- June 25, 2012 – Met with Carbon County News
- November 29, 2012 – Met with Carbon County Resource Council

2013

- February 22, 2013 – Detailed Scoping Letter mailed to over 230 individuals/groups/agencies
- February 28, 2013 – Press Release
- March 7, 2013 – Met with Rotary Club
- March 14, 2013 – Met with Carbon County Commissioners
- March 14, 2013 – Public meeting in Red Lodge
- March 18, 2013 – Met with Luther residents
- March 19, 2013 – Met with Greater Yellowstone Coalition
- March 26, 2013 – Met with Red Lodge City Council
- March 29, 2013 – District Ranger Letter to the Editor in Carbon County News
- February 27, 2013 – Met with private landowner (Black)
- April 26, 2013 – District Ranger letter to editor in Carbon County News
- June 6, 2013 – Public field trip – Nichols/Willow Creek
- June 18, 2013: Press Release for field trip
- June 25, 2013: Press Release for field trip
- June 28, 2013 – Public field trip – Red Lodge Creek

There was a high degree of public interest in the Greater Red Lodge Project, which generated quite a bit of media coverage, both positive and negative. Media coverage included news coverage, information about meetings and field trips, and included numerous letters to the editor and a public opinion poll. Media coverage was published in the Carbon County News and Billings Gazette on the dates identified below. Articles are available in the project record.

- March 1, 2012: Carbon County News
- March 15, 2012: Carbon County News
- July 3, 2012: Carbon County News
- March 21, 2013: Carbon County News
- March 29, 2013: Carbon County News
- March 30, 2013: Billings Gazette
- April 4, 2013: Carbon County News
- April 11, 2013: Carbon County News
- June 10, 2013: Billings Gazette
- June 13, 2013: Carbon County News
- June 18, 2013: Billings Gazette
- June 23, 2013: Beartooth Recreational Trails Association (Barnard/Dykema) walking tour of DNRC Palisades project and Greater Red Lodge Project (not a USFS event)
- June 27, 2013: Carbon County News

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

US Forest Service, Custer National Forest, Beartooth Ranger District.

3. ALTERNATIVES CONSIDERED:

No Action Alternative

Meet all SMZ regulations.

Action Alternative

4f—This unit has been withdrawn by the USFS for an AP request.

5f—Allow removal of all conifers less than 8" DBH and thinning of conifers greater than 8" DBH to a minimum of 2 TPA. Removal of trees would be by hand thinning or reaching in by mechanized equipment from outside the SMZ. No mechanized harvest operations would occur in the SMZ.

The USFS would be allowed to perform this prescription. It is recommended that conifer trees remaining be within ½ tree height from the stream to ensure their ability to provide large, woody debris for stream recruitment in the future. The area already contains a significant component of Alder, Rocky Mountain Maple and Cottonwoods. These will need to be protected during the removal of the conifers as much as possible. Lop and scattering of slash is allowed within the SMZ so long as the slash does not exceed 15 tons per acre of coarse woody debris over 3" diameter. An alternative to drag slash out of the SMZ and pile for future burning is acceptable if greater than 15 tons per acre of coarse woody debris exists or if preferred by the USFS.

6f—Allow removal of all conifers less than 8" DBH and thinning of conifers greater than 8" DBH to a minimum of 2 TPA. Removal of trees would be by hand thinning or reaching in by mechanized equipment from outside the SMZ. No mechanized harvest operations would occur in the SMZ.

This area is a narrow band in the SMZ that would require work. The USFS would be allowed to perform this prescription. Most of the trees to be removed in this unit are of small diameter and significant ground cover is present. The ground cover will need to be protected during the removal of the conifers as much as possible. Lop and scattering of slash is allowed within the SMZ so long as the slash does not exceed 15 tons per acre of coarse woody debris over 3" diameter. An alternative to drag slash out of the SMZ and pile for future burning is acceptable if greater than 15 tons per acre of coarse woody debris exists or if preferred by the USFS.

8f—Allow Broadcast burning with no lighting in the SMZ. Also allow hand thinning or reaching in by mechanized equipment with lopping and scattering of slash. Thinning operations are requested to 5' from the OHWM. Piling/burning would not be allowed within 50 feet of the high water mark. Broadcast burning in the SMZ would be avoided (no active lighting unless necessary for control measures to cleanup fuel pockets). Fire would be allowed to creep into the SMZ and self-extinguish or be mopped up when convenient.

This area is a narrow piece in the northwest corner of the unit with significant wet areas when it was visited in June. It is expected that the fire will burn very little in the SMZ. When this unit is burned a staffed (2 personnel) engine, Type 6 or better will be placed along the road immediately adjacent to the unit when active fire is burning towards the SMZ. The fire will have spreading into the SMZ stopped

as early as fire behavior allows within the SMZ and will be mopped up when convenient. When following these requirements, the USFS would be allowed to conduct the prescription above.

8t—This unit has been withdrawn by the USFS for an AP request.

9f—Allow removal of all conifers less than 8" DBH and thinning of conifers greater than 8" DBH to a minimum of 2 TPA. Removal of trees would be by hand thinning or reaching in by mechanized equipment from outside the SMZ. No mechanized harvest operations would occur in the SMZ.

The USFS would be allowed to perform this prescription. A small area near the northwest part of this unit had slopes greater than 35% within the SMZ. This area is upland habitat and was not thought to be in unit 9f during the field visit. To confirm, any areas in the unit with slopes over 35% are not to be thinned to the prescribed 2TPA and must confirm to SMZ laws in regard to tree retention within the SMZ. Areas with slopes less than 35% may be subject to the prescribed 2 conifer TPA greater than 8" DBH and removal of all conifers less than 8" DBH.

21f—This unit has been withdrawn by the USFS for an AP request.

22f—Allow removal of all conifers less than 8" DBH and thinning of conifers greater than 8" DBH to a minimum of 2 TPA. Removal of trees would be by hand thinning or reaching in by mechanized equipment from outside the SMZ. No mechanized harvest operations would occur in the SMZ.

This stand has very little conifers already, it is mainly an aspen and cottonwood stand. Removal of all conifers under 8" DBH and retaining 2 conifer TPA greater than 8" DBH would be allowed. The aspen and cottonwood trees would need to be protected during the removal of the conifers as much as possible. Lop and scattering of slash is allowed within the SMZ so long as the slash does not exceed 15 tons per acre of coarse woody debris over 3" diameter. An alternative to drag slash out of the SMZ and pile for future burning is acceptable if greater than 15 tons per acre of coarse woody debris exists or if preferred by the USFS.

23t—Allow SMZ to be thinned by hand or by reaching in with mechanized equipment. Fire would be allowed to creep into the SMZ and self-extinguish or be mopped up when convenient. Broadcast burning in the SMZ would be avoided (no active lighting unless necessary for control measures to cleanup fuel pockets).

This unit has extensive wetlands adjacent to the SMZ that are then extended for the SMZ and also isolated wetlands. It is recommended but not required that this unit be harvested under winter conditions to minimize rutting and ensure the integrity of the SMZ. The proposed prescription would be approved for both thinning and broadcast burning with no active lighting unless necessary for control measures to cleanup fuel pockets.

28f—This unit has been withdrawn by the USFS for an AP request.

29f—This unit has been withdrawn by the USFS for an AP request.

30f—This unit has been withdrawn by the USFS for an AP request.

31f—This unit has been withdrawn by the USFS for an AP request.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:
Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

No significant impacts are expected. All units where thinning of conifers is prescribed have significant vegetative cover other than the conifers that would be removed and the integrity of the soil quality, stability and moisture will be maintained.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:
Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

The six functions of the SMZ as identified in the SMZ law (77-5-301[1] MCA) will be maintained.

1. Acts as a sediment filter to maintain water quality
    a. The ability for the SMZ to act as a sediment filter will remain intact as significant vegetative cover will remain on the site in the form of aspens, cottonwoods, rocky mountain maple, alder and other various ground covers. The small areas where fire may creep into the SMZ will be quickly extinguished by USFS personnel or naturally due to the moist conditions of the fuels in the vicinity of the stream.

2. Provides shade to regulate stream temperature
    a. The remaining trees, 2TPA of conifers over 8" DBH and cottonwoods will continue to provide shade and regulate stream temperature.

3. Supports diverse and productive aquatic and terrestrial riparian habitats
    a. Aquatic and terrestrial riparian habitats will be fully protected as the proposed AP will include mostly thinning done by hand. The small areas where fire may creep into the SMZ will be quickly extinguished by USFS personnel or naturally due to the moist conditions of the fuels in the vicinity of the stream.

4. Protect the stream channel and banks.

Vehicles and logging machinery would not be driven within 50 feet of wetlands, with the exception of maintenance/reconstruction/decommissioning of existing roads and designated. SMZ regulations regarding tree retention would be extended to apply to isolated wetlands. (USFS, April 2014) Stream channels and banks will retain the majority of their vegetative cover which will ensure the stability of the stream channel and banks.

5. Provides large, woody debris that is eventually recruited into a stream to maintain riffles, pools, and other elements of channel structure

   Fisheries or hydrology staff will assist with leave tree marking along the riparian corridor beyond the 15-foot buffer. Leave trees would be those that, if they fell perpendicular to the channel, the diameter of the fallen tree at the high water mark of the channel would be greater than 8 inches in diameter. The purpose is to protect those trees that when recruited to the channel, are most likely to provide well-anchored and stable LWD while allowing harvest of smaller diameter trees that contribute to high fuel loads. (USFS, April 2014)

6. Promotes floodplain stability
   a. No significant impacts to water quality, quantity or distribution are expected. All operations are happening high in the watershed where there is little floodplain. The remaining vegetation will ensure the stability of the floodplain where work is taking place.

6. AIR QUALITY:
What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

No significant impacts are expected.

7. VEGETATION COVER, QUANTITY AND QUALITY:
What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

The proposed AP would reduce conifer encroachment into cottonwood and aspen stands and areas that are naturally comprised of riparian vegetation. The species composition of the area will have less of a conifer component after project completion but the vegetation remaining will be adequate to ensure the SMZ vegetation cover, quantity and quality. One example of this would be unit 22F. A 100' tape was pulled that showed 13 deciduous trees that would remain post conifer thinning in the SMZ over 8"DBH. This level of remaining cover will ensure adequate vegetation cover, quantity and quality after removal of conifers as prescribed.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

The small, limited area will not impact any fish as actions will ensure stream temperature, shade and future retention of large, woody debris and return the area to a more riparian set of species.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:
Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Considerations for unique, endangered, fragile and limited environmental resources were best described in the USFS NEPA document draft, published April 2014 beginning on page 3-376.

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

No identified sites in areas covered by this AP.

11. AESTHETICS:
Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The thinning of encroachment species with natural riparian vegetation remaining is not expected to result in any detriment to aesthetics. The additional few acres of burning that may occur in SMZs is also not expected to result in any detriment to aesthetics.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:
Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

No impacts are expected.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:
List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

The USFS "Greater Red Lodge Area Vegetation and Habitat Management Plan" Draft EIS published April 2014 is the only known other environmental document pertinent to the area of the AP request.

The Montana Department of Natural Resources Palisades EA for a 789 acre timber sale immediately to the east of the AP area was published in 2013 but does not cover any of the acreages where APs have been requested.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

None

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

None

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

None

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

None

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

None

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

The AP is in the area being managed under the Custer National Forest "Greater Red Lodge Area Vegetation and Habitat Management Plan" whose Draft EIS was published in April 2014. The results of this AP request will effect how the USFS is able to follow this plan and associated environmental analysis.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

The USFS manages a high-use recreational area near the AP requests but the approval of either alternative would have no significant impact on recreation activities in the area.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

None

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

None

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

None.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

None

EA Checklist Prepared By:	**Name:** Bradley M. Shoemaker	**Date:** 8/5/2014	
	Title: SLO Area Forester		

V. FINDING

25. ALTERNATIVE SELECTED:

Action Alternative

26. SIGNIFICANCE OF POTENTIAL IMPACTS

NONE

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

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

EA Checklist Approved By:	**Name:** Matt Wolcott	
	Title: Southern Land Office, Area Manager	
Signature:		**Date:** Aug 13 2014

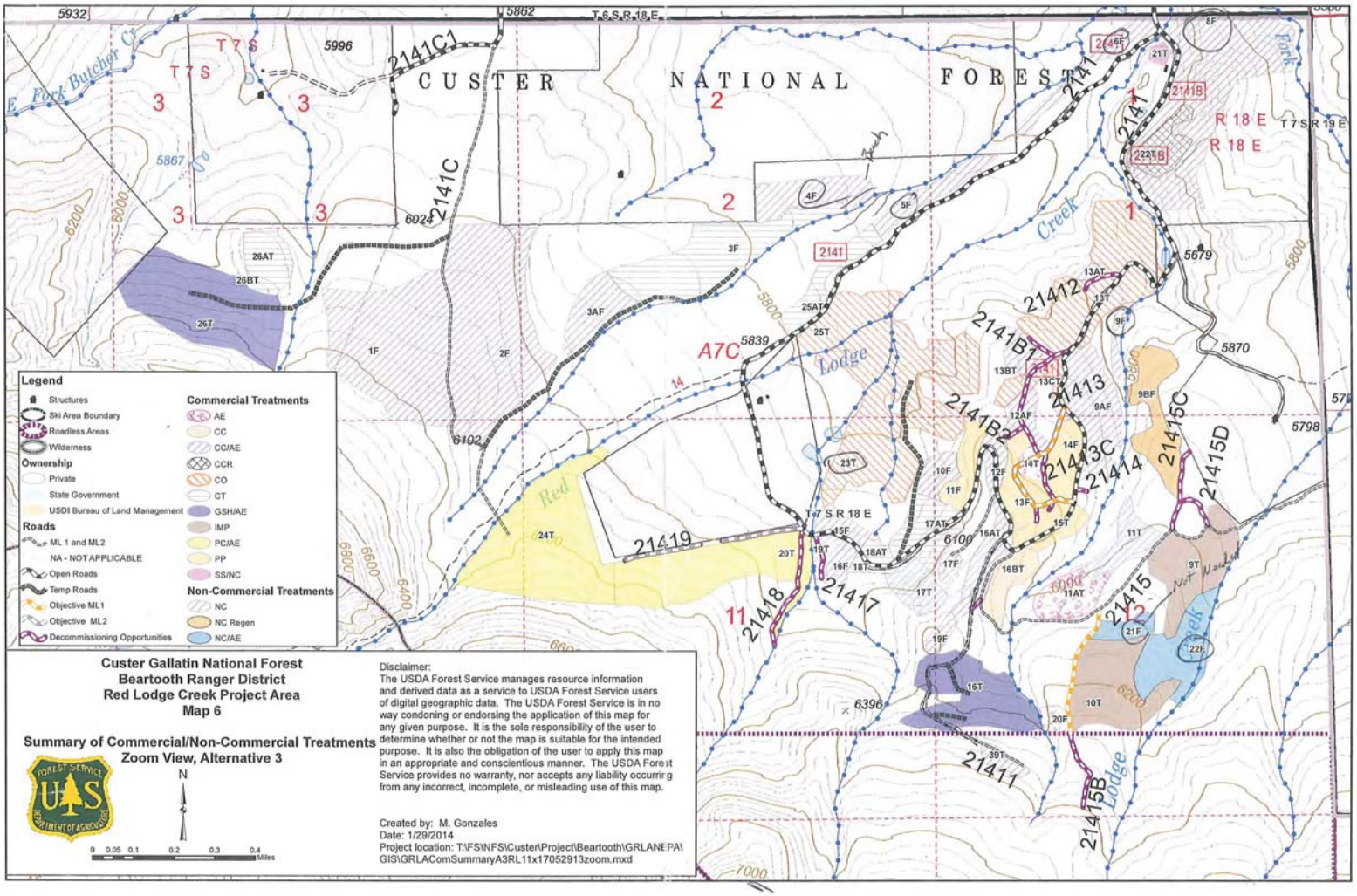
Greater Red Lodge Area Vegetation and Habitat Management Project
Beartooth Ranger District
Custer-Gallatin National Forests
Carbon County, MT

Request for Alternative Practices Waiver

In July 2013, the Forest Service and MTDNRC visited sites proposed for an Alternative Practices waiver as outlined in the DEIS for the Greater Red Lodge Project (p. 2.7-2.8). Based on these field reviews and modifications made to several of the proposed treatment units, the FS has narrowed the scope of the Alternative Practices Waiver request to the following units:

Alternative Practices Waiver Request for Greater Red Lodge Project

Unit	Purpose of Treatment	Proposed Treatment
5f, 6f, 9f, 22f	Maintain grasslands and wet meadows (i.e. nonforest) Collectively, these units total 41 acres. Alternatives practices waiver sought for about 17 acres.	Treatment is proposed to maintain grasslands/wet meadows (i.e. non-forest). The proposed prescription specifically targets removal of all conifers less than 8" dbh, and would thin conifers greater than 8" dbh to two trees per acre, which would not meet SMZ requirements for tree retention. Selective tree cutting in riparian areas may occur by hand or by reaching into the riparian area with mechanized equipment (no driving), and scattering the slash. An alternative practices waiver is needed to deviate from the SMZ tree retention requirements to maintain wet meadows in the riparian areas.
23T	63 acre unit The purpose of the clearcuts is to provide for age class diversity in lodgepole pine. The purpose of the thinning is to reduce fire and beetle hazard. Both treatments would also provide for pure and mixed aspen of various age classes. Alternatives practices waiver sought for about 10 acres.	Unit 23t is a proposed 63 acre combination unit that includes about 36 acres of clearcut and 27 acres of thinning. Broadcast burning is proposed in the clearcut areas to prepare the site for natural regeneration. SMZs may be thinned, but would not be clearcut. Thinning would be by hand or by reaching in with mechanized equipment. Broadcast burning in the SMZ would be avoided (no active lighting unless necessary for control measures to cleanup fuel pockets). Fire would be allowed to creep into the SMZ and self-extinguish or be mopped up when convenient. An alternative practices waiver is needed for the broadcast burning. Note Unit 23t includes a large wetland complex in the southern portion of the unit. A design criterion would prohibit vehicles and logging machinery from driving within 50 feet of wetlands, with the exception of maintenance/reconstruction/ decommissioning of existing roads and designated temporary crossings. SMZ requirements regarding tree retention would apply to wetlands in the unit.



Custer Gallatin National Forest
Beartooth Ranger District
Red Lodge Creek Project Area
Map 6

Summary of Commercial/Non-Commercial Treatments
Zoom View, Alternative 3

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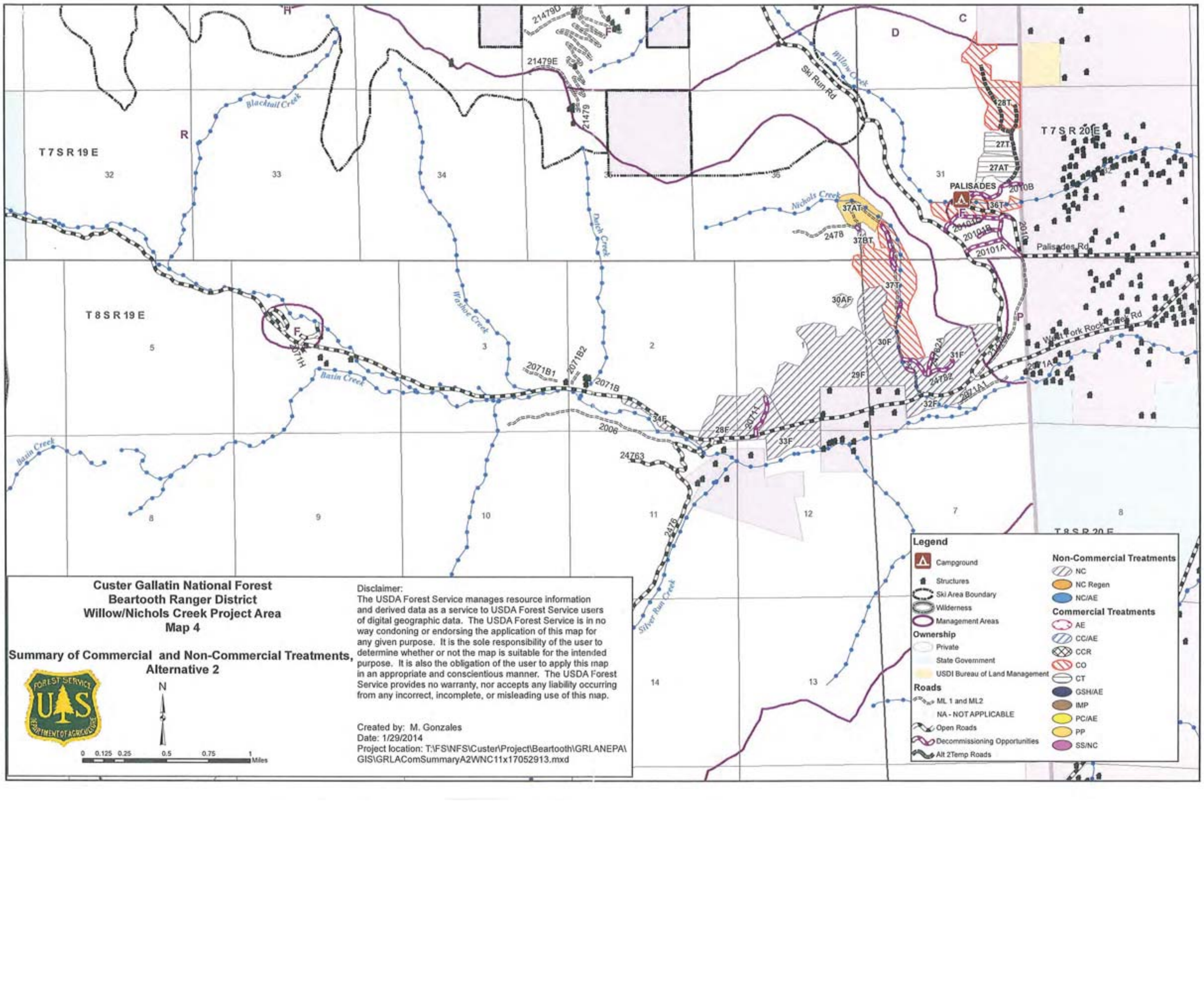
Date: 1/29/2014
Project location: T:\FS\NFS\Custer\Project\Beartooth\GRLANEPA\GIS\GRLAComSummaryA3RL11x17052913zoom.mxd



Custer Gallatin National Forest
Beartooth Ranger District
Willow/Nichols Creek Project Area
Map 4

Summary of Commercial and Non-Commercial Treatments, Alternative 2

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Date: 1/29/2014
Project location: T:\FS\NFS\Custer\Project\Beartooth\GRLANEPA\GIS\GRLAComSummaryA2WNC11x17052913.mxd