

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Lakeview - South Centennial Valley – Alternative Practices
Proposed Implementation Date:	4/2015 – 12/2017
Proponent:	Various Private and Agency Ownerships within the Analysis Area
Location:	South Centennial Valley within the following geographical area: T15S-R5W, 14S-5W, 15S-4W, 14S-4W, 15S-3W, 14S-3W, 14S-1W, 14S-2W, 14S-1E
County:	Beaverhead

I. TYPE AND PURPOSE OF ACTION

The DNRC formally and informally received Alternative Practice (AP) requests from private contractors and Agency Specialists in this area with very similar vegetative restoration treatment plans to remove majority of the encroachment conifers within SMZ's (Class 1 and Class 2 streams) and encourage aspen and cottonwood regeneration within decadent stands present in these riparian zones. Individual projects would receive a specific approval letter with an Alternative Practice number, and required signed affidavit by the proponent of each AP. The driving issue with these requests is vegetation diversity, historic restoration and forest fuels reduction adjacent to the community of Lakeview and the Red Rock Lakes Wildlife Refuge Headquarters. The forest cover types within these SMZ's are Broadleaf and Conifer Riparian however, Douglas -fir, spruce, subalpine fir and lodgepole pine have significantly encroached with closed canopies adversely affecting the deciduous species that once dominated these riparian areas. This vegetative cover change has occurred over the past 100-125 years through fire suppression and natural succession thus reducing viable native cottonwood, aspen, willow, alder and other deciduous riparian vegetation that are essential for a healthy riparian zone. Early successional deciduous scrubs and trees desired for a healthy and diverse riparian area are virtually non-existent under current dense conifer canopies. The primary purpose of this action is riparian health, wildlife habitat, and protection of the streams potentially impacted. Mature conifers that are growing on the banks of the streams thus providing shade and bank stabilization benefits will not be removed.

According to MCA 77-5-301 through 307, DNRC is authorized to administer and enforce the provisions of the SMZ Law. This Law was developed to protect the public interest of water quality and quantity within forested areas; provide for standards, oversights and penalties to ensure forest practices conserve the integrity of SMZ's; provide guidelines for wildlife management within SMZ's; and allow operators necessary flexibility to use practices appropriate to site-specific conditions in the SMZ. ARM 36.11.301 through 313 further specify the design of SMZ boundaries, allowable activities and prohibitions within the SMZ, penalties and other related provisions.

According to MCA 77-5-304 and ARM 36.11.310, DNRC may approve alternative practices that are different from practices required by the SMZ Law only if such practices would be otherwise lawful and continue to conserve or not significantly diminish the integrity and function of the SMZ. Treatment proposed would be limited to operation of a track mounted "mechanical feller-buncher" inside the 50 foot SMZ buffer, but no closer than 25 feet to the ordinary high water mark (OHWM). This treatment would be conducted on slopes less than 10% and would allow removal of Douglas fir, Engelmann spruce and lodgepole pine to below minimum retention standards as identified under Rules 4 and 5 in the Montana Guide to the Streamside Zone Law and Rules 2006 (ARM 36.11.310-313). Additional stipulations for approval of this request would include:

- Operation of the Mechanical harvester "feller-buncher" inside the SMZ would be operated in a straight-in and straight-out manner with the machine "packing trees" back out of the SMZ on its own track path to minimize soil disturbance. Cable yarding the felled trees out of the SMZ is permissible under frozen snow-covered conditions or dry soil conditions. Therefore, operations within the SMZ would only occur during periods when soil disturbance can be minimized under frozen or dry ground conditions; frozen means frost to a depth of four inches minimum and snow to a depth of eight inches, dry soil means soil moisture is 20% or less within the first 4 inches of soil depth.

- Mitigation measures would include no ground disturbance 0-25' from the OHWM, Minimal ground disturbance 26' to 50', grass seeding and fine slash debris placed on disturbed areas to prevent run-off and sediment from reaching the streams.
- Larger trees growing on the stream banks will be retained for bank stability and shade. Existing live aspen, cottonwood, and all brush species, would be retained and protected to the greatest extent possible, particularly within the 0-25' zone from OHWM.
- No new excavated roads, skid trails or log landings will occur within the SMZ's.

II. PROJECT DEVELOPMENT

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

Provide a brief chronology of the scoping and ongoing involvement for this project. List number of individuals contacted, number of responses received, and newspapers in which notices were placed and for how long. Briefly summarize issues received from the public.

Numerous field reviews have been conducted between June 2012 and March 2015 within this area by Mike Atwood, DNRC Dillon Unit Forester and DNRC Trust Land Forest Management Bureau specialists in the field of fisheries, soils, watershed, wildlife, and forestry.

Other contacts:

- Martin Miller, Montana Natural Heritage Program
- Neighboring property owners within the project area.
- Matt Jaeger, Department of Fish, Wildlife and Parks Fisheries Biologist (Dillon Office)
- Beaverhead County Commissioners.
- The Nature Conservancy (Nathan Korb, Representative)
- Bureau of Land Management fisheries, forestry and wildlife specialists
- Conservation Easement holder on lands involved; US Fish and Wildlife Service (Red Rock Lakes National Wildlife Refuge representatives, and The Nature Conservancy).

OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Examples: cost-share agreement with U.S. Forest Service, 124 Permit, 3A Authorization, Air Quality Major Open Burning Permit.

- No stream crossings or work within the streambanks is proposed with this assessment (MT FWP, DEQ).
- No broadcast burning within the SMZ's involved is proposed with this assessment (DNRC).

3. ALTERNATIVE DEVELOPMENT:

Describe alternatives considered and, if applicable, provide brief description of how the alternatives were developed. List alternatives that were considered but eliminated from further analysis and why.

No-Action Alternative: Not approve the Alternative Practice Requests

Action Alternative: Implementation of Alternative Practices as proposed individually by specific Proponents with specific mitigation measures to protect resources while meeting the objective of the projects.

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 direct, indirect, and cumulative effects to soils.

Mitigation to possible soil impacts : Limit equipment operations to periods when soils are dry (less than 20% soil moisture), frozen or snow covered (12 inches packed or 18 inches non-packed over minimum 4 inches frost depth). Track machine will enter and leave SMZ at 90 degrees to stream bank. Placement of fine slash over disturbed soils, and seed disturbed soils with appropriate grass seed mix.

If recommended mitigation measures listed above are effectively implemented, a low risk of low level direct and indirect effects to soil resources is expected and long-term soil productivity will be maintained. No cumulative effects to soil resources are expected.

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 direct, indirect, and cumulative effects to water resources.

Alternative Practices would be issued for Class 1 and Class 2 perennial streams within the identified area and watersheds. Most of this watershed is tributary to the upper and Lower Red Rock Lakes in the Red Rock River drainage of the Upper Missouri River Basin. Streams in this area flow six months or more and contribute surface flow to another stream or other bodies of water (ponds in this case), and may or may not support fish. Floodplain stability is not expected to change as a result of selective harvesting majority of the dominant DF, LP and ES within the SMZ. Where fish are present, sufficient canopy and leave trees will be retained as advised by MTFWP fisheries specialists for shade, water temperature, and recruitment of large older dead material.

Each individual Alternative Practice will be evaluated and issued specific conditions and mitigation requirements consistent with this environmental assessment.

Adverse impacts to the stream banks or channel are not expected to occur as a result of this operation. No cumulative adverse effects to water quality or quantity are anticipated from the proposed action.

6. AIR QUALITY:

What pollutants or particulate would be produced (i.e. particulate matter from road use or harvesting, slash pile burning, prescribed burning, etc)? Identify the Airshed and Impact Zone (if any) according to the Montana/Idaho Airshed Group. Identify direct, indirect, and cumulative effects to air quality.

A Hazard Reduction Agreement will be issued for each project through the DNRC. No machine piling of slash or broadcast burning will be allowed within the SMZ's. All burning of piles associated with this project will be performed during the late fall and winter months in accordance with rules set by the Montana/Idaho Airshed Group 2006. The project area is located within Montana Airshed 7 which encompasses portions of Beaverhead and Madison Counties. Currently this Airshed does not contain any impact zones.

No long-term adverse impacts to air quality are anticipated with this project.

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 direct, indirect, and cumulative effects to vegetation.

The vegetative cover type within these riparian zones is "Broadleaf and Conifer Riparian" These are riparian areas dominated by mixed broadleaf (cottonwood) and conifer forest, with total tree cover from 20 to 100 percent. Associated plant community would include: Aspen, Birch, Black Cottonwood, Douglas-fir, Engelmann Spruce, and Subalpine Fir. Shrub species would include alder, snowberry, thimbleberry, serviceberry, willow, Kinnikinnick, grasses and forbs. This system is maintained by stand-replacing disturbances, such as avalanches, crown fire, insect outbreak, disease, and windthrow within the matrix of conifer forests. The proposed treatment would essentially accomplish the same effect through strategic mechanical harvest.

Two "Sensitive" plant species have been observed within two miles of the proposed project area; Idaho Sedge growing within the wetlands/riparian habitats and Simple Kobresia generally growing at higher elevations (Alpine) than the lower valley bottom SMZ's proposed for treatment. No other sensitive/species of special concern have been documented or observed within the proposed project area.

The proposed treatment would encourage vegetative diversity in species and age class. Wildlife will benefit from the proposed treatment with enhanced food sources and cover over time. Adjacent mature and overstocked conifer stands will provide temporary cover loss associated with this treatment.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify direct, indirect, and cumulative effects to fish and wildlife.

A variety of big game, small mammals, raptors and songbirds use this area. The treatment planned will likely enhance vegetative cover and diversity over time by restoring these riparian corridors to a vegetative condition that would have been present historically prior to fire suppression. Short-term impacts and disturbance is considered to be minimal. Some of these watersheds support cold-water westslope cutthroat trout fisheries.

No adverse impacts are anticipated to the stream channel, water quality, or aquatic habitat as a result of the planned treatment to remove majority of the mature encroaching conifers.

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 direct, indirect, and cumulative effects to these species and their habitat.

The project area is adjacent to the Greater Yellowstone Grizzly Bear Ecosystem and as far as 25 miles west of the ecosystem boundary situated within occupied habitat. Human disturbance (residences, and timber harvest activities) have been in place for several years on lands adjacent to the project with minimal human-bear conflicts to date.

Due to the size, season, duration and harvest method of the proposed projects, direct, indirect or cumulative effects to endangered and sensitive species are expected to be minor.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine direct, indirect, and cumulative effects to historical, archaeological or paleontological resources.

Recent public scoping of tribal representatives (July 2010 & May 2014) for a larger timber harvest project on state lands, and a Class 1 (literature review) by DNRC staff archaeologist on state lands within the project area has not revealed known special historical, archaeological or paleontological resources being identified at this location. If previously unknown cultural or paleontological materials are identified during project related activities, it is recommended the proponent should cease work in the area until a professional assessment of such resources can be made.

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 direct, indirect, and cumulative effects to aesthetics.

Associated effects on aesthetics in the project area are expected to be minimal and temporary. Noise levels and associated traffic will occur from harvest operations but are expected to be minimal disturbance to the small community within this rural project area. Fuels reduction thinning projects and commercial timber harvest has been on-going for several consecutive years in this area without significant impacts to aesthetics, the local community or residents in the area.

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 direct, indirect, and cumulative effects to environmental resources.

None

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.

- A Timber Harvest Plan written by Joe Casey, an Independent Forester for a private landowner and the Conservation Easement Holder (USFWS) was completed February 20 2014.
- The Bureau of Land Management (Dillon Field Office) recently completed the Centennial Watershed Assessment Report January 2015.
- The DNRC has completed two Environmental Assessments for the Odell Creek area involving Salvage Timber harvest on adjacent State lands; Odell Creek Salvage Timber Sale June 2014, and the “YoDell” Salvage Timber Permit in August 2011.
- An Environmental Review of the Centennial Valley, Montana. Joseph M. Trudeau 12/2007
- Montana Natural Heritage Program (DNRC Query – lists and maps for Species of Concern) 2014.

<p style="text-align: center;">IV. IMPACTS ON THE HUMAN POPULATION</p>

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| <ul style="list-style-type: none">• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i>• <i>Enter “NONE” if no impacts are identified or the resource is not present.</i> |
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14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Health and safety risks to humans and recreational structures (homes, outbuildings, and utilities) will be reduced as a result of the planned treatment to reduce forest fuels and tree stocking in mature forest stands. Adverse risks posed by this project are expected to be minimal.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

Timber harvest will be conducted by professional contractor’s providing employment and commerce. Trees will be utilized for commercial sawlogs, an agricultural commodity used extensively in this region by the public as a renewable resource. The proposed project would contribute to industrial production in the region.

QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify direct, indirect, and cumulative effects to the employment market.

The portion of the projects affected by the Alternative Practice have minimal impacts to quantity and distribution of employment. The projects proposed are relatively small timber harvest operations that collectively help to maintain the current employment in the industry.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify direct, indirect, and cumulative effects to taxes and revenue.

There would be no measurable direct impact from this proposed action on tax revenues. The renewable resource wood products produced will help sustain the forest products industry and associated property and labor income tax base for local communities.

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 direct, indirect, and cumulative effects of this and other projects on government services

Minimal demand is anticipated. Pro-active vegetative restoration treatments proposed will likely reduce the risk of catastrophic wildfire and have a direct result in a reduction of demand on government resources committed to protection of structures and human health and safety within the forest setting.

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.

This project is consistent with timber management plans and goals implemented on adjacent DNRC and BLM lands. The USFWS Refuge is planning a similar timber management project as well. Beaverhead County has facilitated grants over the past several years to private owners in this area to reduce forest fuels and fire risk in and around the town of Lakeview.

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 direct, indirect, and cumulative effects to recreational and wilderness activities.

This project area is surrounded by Red Rock Lakes National Wildlife Refuge, BLM (Wilderness Study lands), State Forest lands, and private lands cooperating in the FWP Block Management Access program. Public non-motorized hiking trails on the Refuge are located a safe distance from this project. No significant impact to recreation or Wilderness activities is anticipated.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify direct, indirect, and cumulative effects to population and housing.

No change in population will result by this project.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

No change in social structures and mores are expected as a result of this project.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

The project would have positive long-term effects on the vegetative diversity of the area being treated. No change or affects to cultural uniqueness is anticipated.

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 direct, indirect, and cumulative economic and social effects likely to occur as a result of the proposed action.

None.

EA Checklist Prepared By:	Name: Mike Atwood	Date: March 26, 2015
	Title: Dillon Unit Forester	

V. FINDING

25. ALTERNATIVE SELECTED:

Action Alternative: Implementation of Alternative Practice as proposed with additional mitigation measures.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Minimal short-term impacts are anticipated.

Proponent Planned Mitigation Measures:

- All SMZ's will be marked (flagged or painted) prior to harvest.
- Only a track feller-buncher may enter the Streamside Management Zone (SMZ) buffer traveling in a straight-in and straight-out manner within the SMZ.
- Feller-buncher will operate no closer than 25 feet to the ordinary high water mark and only on slopes less than 20%. Selected trees will be packed-out of SMZ and placed outside SMZ buffer for skidding, processing, and loading.
- All sub-merchantable trees and shrubs will be left and protected as much as possible inside the SMZ.
- Trees that are supporting the stream banks will be retained for shade and stream bank stability.
- Downed trees that have naturally fallen across the stream course will be left.
- Crossing of live streams or standing adjacent wetland is not permitted.
- Disturbed soil areas inside the SMZ will be grass seeded and covered with slash filter as needed.
- Limit equipment operations to periods when soils are dry (less than 20% soil moisture), frozen or snow covered (12 inches packed or 18 inches unconsolidated) to minimize soil compaction, rutting vegetative disturbance.
- Retain larger course woody debris and fine slash within the SMZ corridor to help provide shade and organic matter to maintain soil productivity and soil stability. Healthy deciduous (cottonwood, and aspen) trees and shrubs will be protected within the SMZ to maintain riparian vegetation and filter.
- Should any of the six functions of the SMZ be significantly diminished, all activities will cease until a DNRC Forest Practices representative is notified and can assess the situation.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS
 More Detailed EA
 No Further Analysis

EA Checklist Approved By:	Name: Timothy Egan	
	Title: Dillon Unit Manager	
Signature: /S/Timothy Egan		Date: 3/26/2015