CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Lost Prairie Creek SMZ Alternative Practice
Proposed Implementation Date:	Fall 2018
Proponent:	Pyramid Mountain Lumber Field Contact: Scott Kuehn
Location:	Section 17 Township 15 North Range 14 West
County:	Missoula

I. TYPE AND PURPOSE OF ACTION

Scott Kuehn, on behalf of the Pyramid Mountain Lumber, has applied for a Streamside Management Zone (SMZ) Alternative Practice on approximately 1,400 feet of a Class 3 SMZ segment of Lost Prairie Creek. The purpose of the Alternative Practice is to allow access for salvage and timber harvest within the SMZ.

The application involves the following specific request:

-Equipment operation within the SMZ to facilitate skidding and tree removal in up to 14 locations.

II. PROJECT DEVELOPMENT

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

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

This project is located on private property. No public scoping or other involvement is needed.

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

None.

3. ALTERNATIVES CONSIDERED:

No Action Alternative: Timber harvest would likely occur and meet all SMZ rules. Dead timber from blowdown events and beetle activity is cast throughout the SMZ. Access to the SMZ is limited due to steep slopes on each side of SMZ. Dead timber would likely remain in the SMZ and the stand would remain untreated. No SMZ harvest would occur and the stand would remain in an unhealthy condition.

Action Alternative: Under this alternative, an Alternative Practice would be granted. The Alternative Practice would allow the proponent to operate within the SMZ and to facilitate timber salvage and harvest operations. Mitigations would be a part of the Alternative Practice, they are outlined within the WATER QUALITY, QUANTITY AND DISTRIBUTION portion of this analysis.

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.

The proposed Alternative Practice area is located within a rocky drainage. There is evidence of a historic road prism running through the drainage and SMZ. The proposed operation area is relatively flat (less than 10% slope). The soils in this area are very stable and resistant to compaction. Soil disturbance would be minimized in the areas of activity through limiting use to dry or frozen conditions. It is unlikely there would be further impacts to geology, soil quality, stability and moisture under either alternative.

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.

Is it possible that implementing this alternative practice would impact the integrity of the SMZ and these specific functions?

-Ability to act as an effective sediment filter.
-Ability to provide shade to regulate stream temperature.
-Protection of stream channel and banks.
-Ability to provide large woody debris for eventual recruitment into the stream to maintain riffles, pools, and other elements of channel stability.

Existing Condition

This stretch of Lost Prairie Creek consists of multiple broken stream channel segments that average one to two feet in width. Water flow only occurs during spring runoff on high flow years for a short period of time. This creek does not deliver to any other body of water, as its flow is dissipated through a wide floodplain. Upstream of this location, the creek loses channel and does not meet the definition of SMZ which isolates it from the Class 1 portion of the creek. Soils in this area are relatively shallow and well drained due to the rocky nature of the drainage. Grasses and light brush are scattered throughout the channel and SMZ. There are only a few sparse submerchantable trees and regeneration growing within the SMZ. There is evidence of an old roadbed or dozer trail that crosses the SMZ. This area was probably logged and prospected for gold over 100 years ago. The creek channel runs approximately 2,000 feet from the property boundary to its ending location. A road crosses the creek in two locations along this stretch with evidence of multiple historic dozer trails or roads crossing it. There are no culverts or pipes located along this stretch of creek.

Potential Environmental Effects

No Action Alternative: The SMZ law would be followed for this commercial timber harvest operation. Because of the steepness of the slopes surrounding the SMZ, little-to-no timber harvest would occur. Downed material would remain in the SMZ and stream channel and more material would most likely accumulate over time.

Action Alternative: Under the action alternative an Alternative Practice would be granted to allow equipment operation to occur in approximately seven segments of the SMZ to minimize impacts to the SMZ and facilitate salvage and timber removal. These segments would be identified and approved prior to operations.

-The ability of the SMZ to act as an effective sediment filter shall be maintained by retaining all present vegetative cover.

-The ability of the SMZ to provide shade is maintained by the retaining submerchantable trees and shrubs to the extent possible. Existing material that is in the stream channel would not be removed.

-Full protection of the stream channel and banks is maintained by only crossing the stream channel at designated locations at intervals of no less than 200 feet as defined by the SMZ law. A skid trail would be allowed in one location within four of the fourteen proposed segments within the SMZ to facilitate operations.

-Large woody debris and existing fallen material found within the stream channel would remain intact and in place. Some trees have recently broken and fallen into across the channel from a heavy snow event. Any windthrown or downed commercial trees currently impacting the stream channel that are cut for yarding operations would be documented prior to removal.

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.

Slash created from the project would need to be disposed of in accordance with all applicable laws. Impacts would be expected to be the same under either alternative.

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.

No Action: No harvest would occur within the SMZ. Forest health would continue to decline, and blowdown or broken trees would continue to fall into the SMZ and channel.

Action Alternative: Harvest and salvage of timber within the SMZ would occur. Forest health would be expected to increase as more sound and desirable trees would be left. Existing ground cover, including shrubs and submerchantable trees,would be retained to the extent possible, and any exposed soil would be required to be immediately grass seeded. Overstory tree retention would follow SMZ law requirements.

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.

No Action: The SMZ law would followed and no impacts to fish, wildlife or birds would be expected.

Action Alternative: The SMZ law would be followed for overstory tree retention, shrubs and submerchantable timber would be retained to the extent possible.

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.

No impacts to unique, endangered, fragile or limited environmental resources would be expected under either alternative.

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

If the proposed action alternative is selected no impacts beyond those expected under the no action alternative would likely occur.

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.

If the proposed action alternative is selected no impacts beyond those expected under the no action alternative would likely occur.

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.

If the proposed action alternative is selected no impacts beyond those expected under the no action alternative would likely occur.

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.

None.

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.

Under either alternative the project would be expected to keep current jobs active for the duration of the project. If the action alternative were selected the jobs could last a couple of weeks longer.

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.

No change in local and state tax base and tax revenues would be expected under either alternative.

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

No change in government services would be expected under either alternative.

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.

None.

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 proposed action alternative and the no action alternative would have the same impacts to access and quality of recreational and wilderness activities.

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.

The project has no direct implications for density and distribution of population and housing.

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

No measurable impacts related to social structures and mores would be expected under either alternative.

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

No measurable impacts related to cultural uniqueness and diversity would be expected under either alternative.

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.

N/A

EA Checklist Prepared By:	**Name:**	Brad French	**Date:**	September 24, 2018
	Title:	Clearwater Service Forester		

V. FINDING

25. ALTERNATIVE SELECTED:

Following a review of the document as well as the corresponding Department policies and rules, the Action Alternative has been selected because it meets the intent of the project objectives outlined in Section I – Type and Purpose of Action. This includes but is not limited to the objective to allow access for salvage and timber harvest within the SMZ.

26. SIGNIFICANCE OF POTENTIAL IMPACTS

I find that the Action Alternative will not have significant impacts for the following reasons:

- The Action Alternative is in compliance with the existing laws, rules, policies, and standards applicable to this type of proposed action.
- Appropriate mitigations have been proposed to minimize potential impacts to resources such as terrestrial, avian and aquatic life and habitats; soil; vegetation; and water quality, quantity, and distribution.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

☐	EIS	☐	More Detailed EA	**X**	No Further Analysis

EA Checklist Approved By:	**Name: Kristen S. Baker-Dickinson** **Title: Clearwater Unit Manager**	
Signature:	***/s/ K. Baker-Dickinson***	**Date**: 9/26/2018

DS-97
Rev. 11/01

STATE OF MONTANA
Department of Natural Resources and Conservation
APPLICATION FOR SMZ ALTERNATIVE PRACTICE

Alternative Practice ID Number _____ Application Date: September 4, 2018
(AP-Unit-Number-Year)

Landowner: Calhoun Montana Limited Partnership
Address: 6591 S. Glencoe St. Centennial, Co 80121-3575 Phone Number (508) 824-2724
Contractor: Blackfoot Forestry
Address: 1118 Creek Crossing Road, Msla. MT 59802 Phone Number (406) 240-8273

Person Legally Responsible for Compliance With SMZ Law: Scott Kuehn, Resource Forester, Pyramid Mountain Lumber.

Hazard Reduction Agreement (HRA) Number: Pyramid Mountain Lumber, Master Hazard Reduction Agreement

Site-Specific Alternative Practice Requested: I met onsite with Brad French to look at a the Lost Prairie Creek channel on the Calhoun property. It has defined beds in most of the channel, and in some areas scoured bed, but in other areas. It looks like it was washed clean by last spring's floods. The bed has lots of live vegetation, adding evidence that it does not flow very often. A road crosses the channel and has no CMP and no signs of scour over the road. We walked it down to Elbow Lake and goes sub-surface and no beds and banks are evident prior to the lake. Very little, if any riparian vegetation is present in the SMZ. Brad classified it as a Class 3.

The draw in question is fairly wide in most areas, (~150') but has recent winter blowdown, some of which is across the creek bed. We are requesting salvaging harvest of the blowdown from within the SMZ. As the dry creek bed meanders, there are several areas that the 50' SMZ buffer would be up on the slope and impossible to skid without carving a side hill trail on the hillside. In these areas, we'd request skidding at the toe of the slope, even it is within the SMZ.

Other Alternatives Considered and Justification for proposed Alternative Practice:
We looked at sitting on the edge of the break and winching up some of the trees, but it's just too far to reach the blowdown over the dry creek bed.

The salvage and skidding would occur late in the fall or early winter. This would help protect the SMZ. Salvaging the blowdown and thinning out the remainder of the draw will help make this more fire resilient in case of a fire, and thus protect the SMZ even more if a wildfire does come through.

Planned Mitigation Measures: The SMZ boundary would be flagged and the skid trail ribboned. We would request another onsite visit from Brad to approve the limited need for a skid trail in the SMZ. We would winch out the blowdown from the SMZ, but may have to back into the SMZ to get better lift and avoid excess ground disturbance. Backing into the SMZ in a few places would do less damage than sitting outside the SMZ and dragging the logs. Full suspension is virtually impossible using skidders. We may need to cross the Class 3 stream bed in a few areas, but this is allowed under the SMZ rules. These would be marked on the ground.

Starting Date: November, 2018 Completion Date: January 2019

Legal Description: Section 17, Township: 15N, Range 14W County: Missoula

Lineal Extent Along Stream: 1000' but segment we'd actually need to skid in is much less.
SMZ Width: 50' each side

Stream Class (circle one): One Two **Three**
Wetlands Present __Yes X No

Include a topographic map showing the logging unit boundaries, alternative practice site, streams, wetlands, and existing and/or proposed roads. Also include a plan-view map of the alternative practice site, including location and distance to stream, SMZ boundary, location of mitigation measures, and extent of activity requiring an alternative practice.

Approved alternative practices, including any additional conditions approved by DNRC, shall have the same force and authority as the standards contained in 77-5-303, MCA, and shall be enforceable by DNRC under 77-5-305, MCA, to the same extent as such standards.

cc: **Applicant, Unit Office, Land Office, Service Forestry Bureau, Land Office**