CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Drew Creek Missoula County Park Fire Reduction
Proposed Implementation Date:	August 2013
Proponent:	Missoula County
Location:	Section 8 T16N R14W
County:	Missoula

I. TYPE AND PURPOSE OF ACTION

Missoula County has applied for Streamside Management Zone Alternative Practice for approximately 1,350 feet along Drew Creek, near Seeley Lake MT. Drew Creek is a class 1 perennial stream. The specific Alternative Practice requested is to deviate from the retention tree requirements outlined in 36.11.305 by removing submerchantable trees from within the SMZ.

The purpose of this treatment is to reduce the wildland fire threat to nearby residences, which are as close as 250 feet away. The trees proposed for removal are ladder fuels within the stand. Removing these ladder fuels would reduce the risk of a crown fire and increase safety within this wildland urban interface area. This project is part of a much larger on-going effort by the Seeley Lake Community to reduce fire danger to the community as a whole.

II. PROJECT DEVELOPMENT

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

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

No public scoping was involved regarding the specific proposed Alternative Practices. Public Scoping regarding the project as a whole was done in accordance with Missoula County Procedures.

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. Following harvest, non-commercial cutting, outside the jurisdiction of the SMZ law, would likely occur. Waiting for completion of commercial activities, as regulated under the SMZ law, to finish prior to commencing non-commercial activities would likely result in higher costs to Missoula County.

Action Alternative: Under this alternative, an Alternative Practice to not protect and retain submerchantable trees and shrubs to the extent practicable, would be granted. The following mitigations would be a part of the Alternative Practice.

- All trees that have been cut would be pulled to burn areas outside of the SMZ either by hand or with a winchline. No Equipment Operation is proposed within the SMZ.
- Within the SMZ approximately 65% of the merchantable trees per acre would be retained. The healthiest trees and those providing stream shading or bank stability would be favored for retention.
- Prior to cutting, submerchantable trees would be marked to leave and commercial trees would be marked to cut.
    - All submerchantable trees providing direct stream shading would be retained
    - All trees with roots in the banks of the stream would be retained.

- Understory shrubs and herbaceous plants will be retained to the extent practicable.

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.

Soils are gravely loams and gravely silt loams. Slopes within the SMZ range from flat up to 60%. However, directly adjacent to the stream channel slopes over 25% only exist on approximately 300 of the stream. Under the proposed action alternative harvest would be limited to dry (less than 20% soil moisture) or frozen ground conditions. As a mitigation measure directional felling to ensure no impacts occur to the stream bank would be required. Therefore impacts to geology, soil quality, stability and moisture under either alternative would be negligible to none.

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

The project area is within the Double Arrow subdivision. Homes and other structures exist within 1,000 feet of the proposed project. The Streamside Management Zone is heavily vegetated with mature overstory trees, submerchantable trees, and shrubs. The submerchantable trees and shrubs that currently exist would act as a ladder fuel in the event of a wildfire. The project area is in the upper reaches of the Drew Creek watershed. Drew Creek supports fish in its lower reaches, and is a perennial stream at this location.

Potential Environmental Effects

No Action Alternative: The SMZ law would be followed during commercial activities therefore it is unlikely there would be impacts to water quality, quantity, distribution or to the functionality of the SMZ during commercial activities. However, after commercial activities unmitigated tree cutting and equipment operation could take place.

Action Alternative:

-The ability of the SMZ to act as an effective sediment filter would be maintained as no additional ground disturbance would be expected beyond the no-action alternative.

-The ability of the SMZ to provide shade would be maintained. This is due to the retention of more large trees than is normally required by the SMZ law. Submerchantable trees that provide shade would be retained, and shrubs would be retained.

-Full protection of the stream channel and banks is expected to be maintained as there would be no equipment operation within the SMZ.

-The potential recruitment of Large woody debris would be maintained as more large trees than is legally required under the SMZ law would be retained.

-The ability of the SMZ to promote floodplain stability would not be impacted.

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. No impacts would be expected 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: Harvest would follow the SMZ law. Wildland fire hazard would not be reduced within the SMZ.

Action Alternative: Commercial harvest and sub-merchantable thinning would take place within the SMZ. This thinning would remove nearly all sub-merchantable except those trees with limbs hanging over the stream or roots in the streambank would be retained as a mitigation measure. In the merchantable size classes subalpine fir and lodgepole pine and suppressed spruce trees would be removed, Western larch, Douglas-fir and spruce would be favored for retention. Overall, this treatment would remove ladder fuels and create gaps in the canopy resulting in a healthier timber stand that is less susceptible to catastrophic wildfire.

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.

None.

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.

None.

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

No cultural resources have been identified within the project area. No impacts would be expected under either alternative.

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.

Impacts to aesthetics would be the same under either alternative and would be perceived differently by different people. However, The treatment would be similar to other treatments that have recently taken place nearby and would be considered minimal to moderate by most people.

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.

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.

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 provide a 10 or fewer short term jobs.

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.

The proposed action alternative would reduce Missoula County's costs.

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.

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 project would not alter the use of this county park.

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.

This project is jointly funded by Missoula County and the Federal Grant Funds administered by the Clearwater Resource Council. Performing the submerchantable tree removal at the same time as the commercial timber harvest is expected to reduce the overall cost of the project and the demand for government employees to oversee the project.

EA Checklist Prepared By:	**Name:**	Neil Simpson	**Date:**	06/18/2013
	Title:	Service Forester		

V. FINDING

25. ALTERNATIVE SELECTED:

Action Alternative

26. SIGNIFICANCE OF POTENTIAL IMPACTS

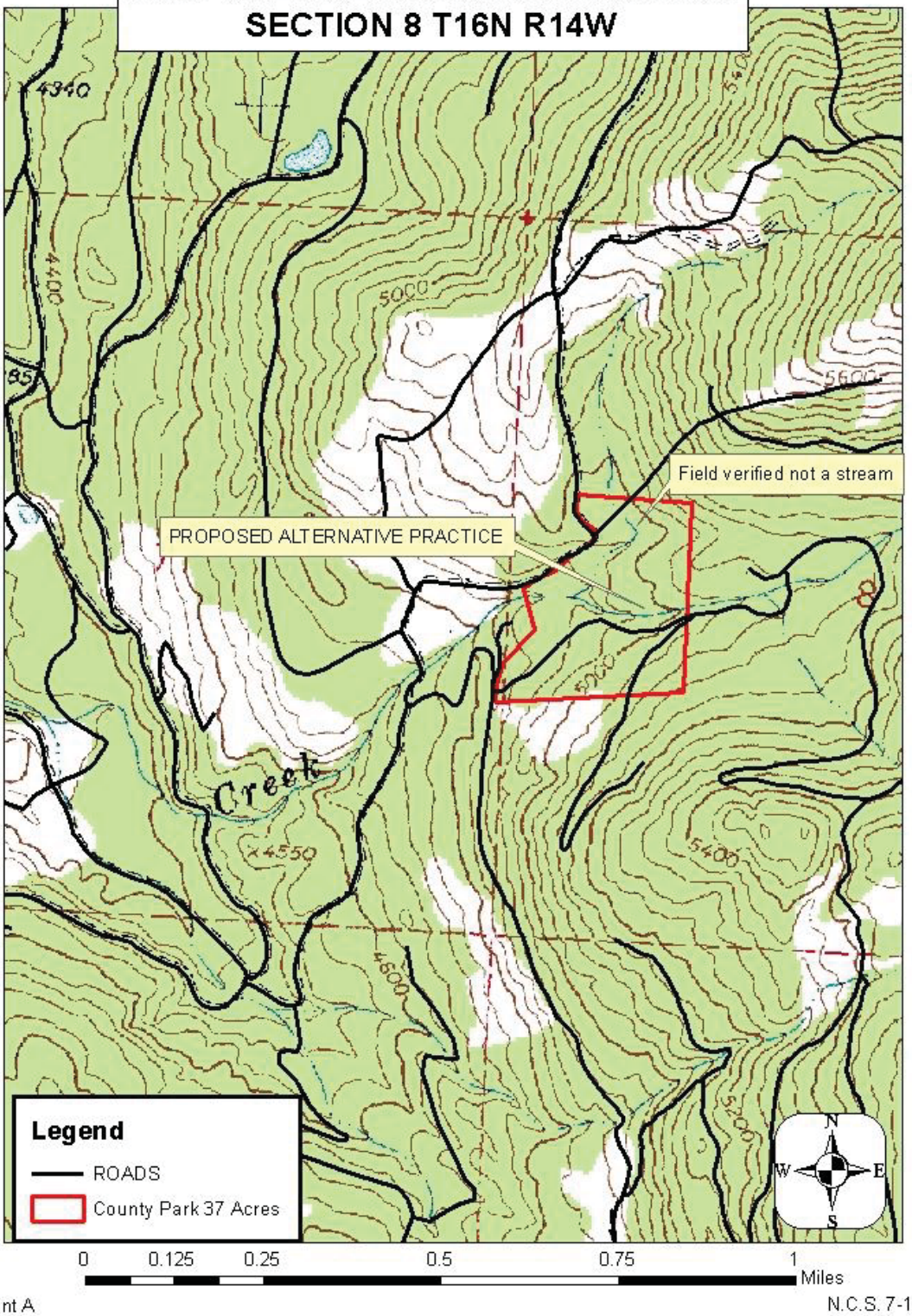
None.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

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

EA Checklist Approved By:	**Name:** David M. Poukish **Title:** Unit Manager		
Signature:	/S/ David M. Poukish	**Date**:	07/16/2013

DREW CREEK COUNTY PARK
PROPOSED ALTERNATIVE PRACTICE
SECTION 8 T16N R14W



Attachment A

N.C.S. 7-16-2013