

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Yank Swamp (BLM) SMZ Alternative Practice
Proposed Implementation Date:	January 2016
Proponent:	USDI-BLM Dillon Field Office
Location:	T3S, R17W, S. 23,24,26, Gibbonsville Road, West of Wisdom, MT
County:	Beaverhead

I. TYPE AND PURPOSE OF ACTION

The BLM Dillon Field Unit has applied for a Streamside Management Zone (SMZ) Alternative Practice to conduct salvage forest practices on the Yank Swamp Timber Sale they have sold to Sun Mountain Lumber. Alternative practices are proposed on approximately 900 feet of SMZ in Unit 3 and approximately 2,500 feet in Unit 4 (see attached map – Yank Swamp). Class 2 and Class 3 intermittent streams are present within the harvest units that were established during winter conditions. Winter logging conditions are a stipulation of the contract area covered by this Alternative Practice.

The purpose of the Alternative Practice is to salvage these stands that are predominately dead and dying lodgepole pine and regenerate the harvest area and SMZ's. The applicant requests permission to:

- Operate equipment within the SMZ to within 15 feet of the ordinary high water mark of Class 2 and Class 3 streams present.
- Removal to below minimum retention standards for all dead and diseased commercial timber within the Class 2 stream present.

Harvest systems would be full mechanized with track mounted feller-buncher entering the SMZ to within 15 feet of the ordinary high water line of the stream banks and packing the trees back out of the SMZ for yarding.

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. Harvest treatment in this case will limit operations of a track propelled feller-buncher inside the 50 foot SMZ to no closer than 15 feet of the ordinary high water mark (OHWM). These treatments would be conducted on slopes less than 20% and would allow removal (salvage) of dead, recently attacked, and diseased 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). Removal to below minimum retention standards outlined in the rules would be allowed for the non-fish bearing Class 2 stream present with the following mitigation measures applied.

- Operation of the track-mounted feller-buncher inside the SMZ would be in a straight-in and straight-out manner to minimize disturbance within the 50 foot SMZ boundary with no equipment operation occurring closer than 15 feet from the ordinary high water mark of the stream.
- Operation would only occur during periods when soil disturbance can be minimized under conditions of frozen ground to a depth of four inches, minimal snow to a depth of eight inches, or periods when ground moisture is less than 20%.
- Erosion mitigation measures would include grass seeding and fine slash filter placed on disturbed areas to prevent run-off and sediment from reaching water.
- Felled or bunched trees would be placed outside of the 50 foot SMZ boundary for Skidding.
- Healthy sapling and intermediate size lodgepole pine, Douglas-fir, Engelmann spruce, subalpine fir, quaking aspen and other deciduous riparian vegetation would be Retained and protected to the greatest extent possible within the SMZ.
- No new excavated roads, skid trails or landings will occur within the SMZ's.

This Alternative Practice would be issued under this EA Checklist for a period of two years (through January of 2018).

II. PROJECT DEVELOPMENT

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

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

MT DNRC: Forestry Assistance Bureau - Forest Practices Program Manager, Dillon Unit Manager, Bureau of Land Management, Dillon Field Office, Beaverhead County Conservation District, Beaverhead County Commissioners, Big Hole Watershed Committee.

The Bureau of Land Management has elected to request an alternative practice and perform the work as directed herein to meet the intension of State law. The BLM is not obligated by memorandum of agreement with the DNRC to obtain an Alternative Practice for management practices on their lands adjacent to streams.

Other contacts or research:

- Montana Natural Heritage Program/NRIS (Species of Concern and Wetlands mapping)
- Montana Fisheries Information System (M-Fish)

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.

N/A

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: Timber harvest would occur within the SMZ without specific mitigation measures applied. The DNRC has no jurisdiction over these operations and excessive disturbance or increased risks to the riparian zone, water quality, or safety may occur with conventional harvest methods.

Action Alternative: Implementation of Alternative Practice requests for practices occurring on these BLLM lands with specific mitigation measures outlined in this EA designed to protect and maintain the six primary functions of a SMZ while meeting the objective of their timber sale project.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT
<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>

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 effects to soils.

Timber harvest is limited to winter conditions in this area due to wet soil types and surface intermittent streams. Therefore it is highly unlikely there will be adverse impacts to geology, soil quality, stability and moisture under either alternative.

A low risk of direct and indirect effects to soil resources is expected provided mitigation measures are applied. No cumulative effects to soil resources are expected. Operating topographical slopes within the SMZ's in this area are generally very favorable running 0- <20%.

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.

With the application of mitigation measures, the SMZ will remain an effective sediment filter through the protection of surface vegetation and soils. Ground disturbance within the SMZ would be minimal to none during winter harvest conditions. The allowance of one track machine operating within 35 feet of the stream on frozen snow-covered ground is anticipated to have minimal impacts to the streams. DNRC may monitor AP sites to verify effectiveness. Minimal direct, indirect, and cumulative impacts to water quality and quantity are expected due to operation restrictions and mitigation measures.

Shrubs and submerchantable trees that provide shade, filtering and cover would also be protected during harvest to the greatest extent possible adjacent to the Class 2 stream. No cumulative adverse effects to water quality or quantity are anticipated from the proposed action designed to protect the integrity of the SMZ filter.

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.

BLM land managers cooperate and performed burning of hazard slash 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. Currently this Airshed does not contain any impact zones. No machine piling of slash or broadcast burning will be allowed within the SMZ's.

No long-term adverse impacts to air quality are anticipated with the projects associated with this assessment.

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.

No Action: Harvest on these federal lands could employ regeneration harvest practices to the ordinary high water mark without equipment restrictions.

Action Alternative: A track feller-buncher will be allowed to within 15 feet of the stream, felling and packing the trees back out of the SMZ to the 50' mark to be skidded to the landing for processing. This practice has shown to result in very minimal impacts on other projects. The significant change that has occurred in this area has resulted from catastrophic beetle infestations impacting the forest canopy, cover, absorption, transpiration of moisture, and the plant communities and cover types generally found in a healthy and age-diverse riparian zone. The harvest prescription planned will attempt to remove dead trees thus restoring the riparian zone to a healthy and age and species diverse condition.

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.

No Action: Harvest and equipment operation could occur within the entire SMZ with minimal impacts anticipated to fish and wildlife.

A variety of big game, small mammals, raptors and songbirds currently use this area. Habitat conditions will likely continue to decline through the loss of viable and resilient vegetative cover within the declining riparian zones.

Action Alternative:

The treatments planned will likely enhance vegetative cover and diversity over time by restoring these riparian corridors to a vegetative condition closer to what would have been present historically prior to fire suppression. Short-term impacts and disturbance is considered to be minimal. Minimal impacts are anticipated to the stream channel, water quality, or aquatic habitat as a result of the planned treatments.

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.

Due to the size, season, duration and harvest method of the proposed projects covered by this analysis, no direct, indirect or cumulative effects to endangered and sensitive species are

anticipated. Potential impacts to endangered and sensitive species have been analyzed with the Big Hole Valley Area Alternative Practice EA Checklist posted on the DNRC website.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

No archaeological investigative work was conducted in response to proposed activities that will occur on BLM lands.

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.

Minimal adverse impacts to the viewshed is expected from the proposed harvest within the upland SMZ's. Noise levels from equipment operation are temporary and minimal in this rural ranch landscape.

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 anticipated.

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.

Several timber harvest projects have occurred on State (DNRC), State DOT (hazard tree removal), BLM, USFS, and private lands in the Big Hole Valley addressing forest health and salvage of bug killed and dying timber that has occurred. Numerous environmental documents and assessments with public scoping were completed for all these projects on public lands with action alternatives employed. Mitigation measures to insure protection of the six primary functions of the SMZ's will be applied to protect water quality and minimize short-term cumulative impacts to watersheds.

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.

Salvage timber harvest activities within the SMZ's is considered to be pro-active vegetative management to reduce associated risks to humans, water quality and air associated with wildfire.

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 forest industry contractors 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 project areas analyzed (SMZ portions) will have minimal impacts to quantity and distribution of employment. Timber harvest activities will help to maintain the current employment in the industry with much needed raw material supply to the value-added processing plants.

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.

No change is anticipated.

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

N/A.

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.

N/A

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.

N/A

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.

N/A.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

N/A.

23. CULTURAL UNIQUENESS AND DIVERSITY:

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

N/A

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.

N/A.

EA Checklist Prepared By:	Name: Mike Atwood Title: Dillon Unit Forester	Date: 01/26/ 2016
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V. FINDING

25. ALTERNATIVE SELECTED:

Action Alternative: Following a review of this assessment. The Action Alternative has been selected to implement Alternative Practices as proposed with specific mitigation measures applied.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

I find the Action Alternative will not have significant adverse 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 in the area as discussed above.

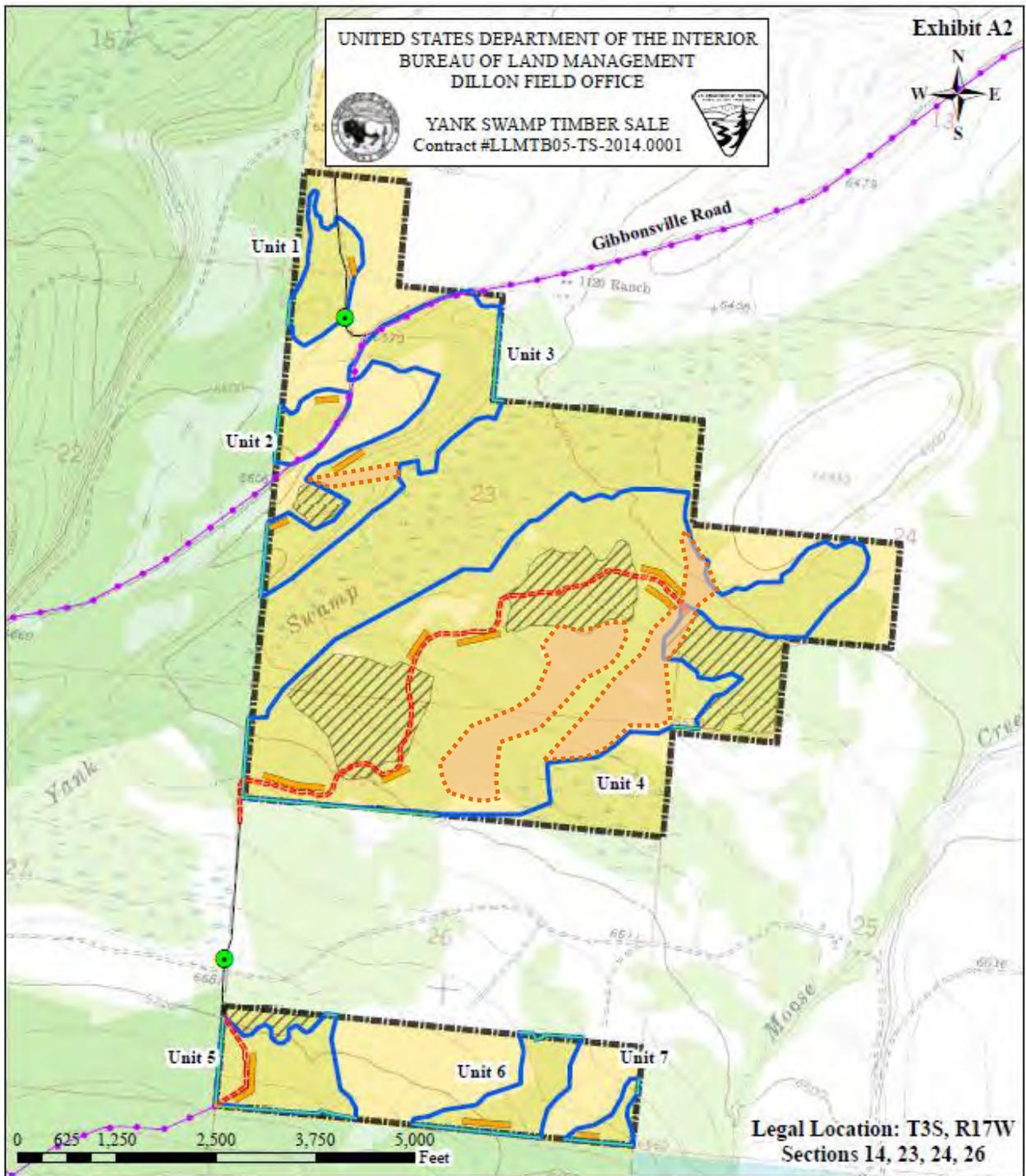
27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

More Detailed EA

No Further Analysis

EA Checklist Approved By:	Name: Timothy Egan Title: Dillon Unit Manager
Signature: /s/ Timothy Egan	Date: 01/26//2016



Contract Area	Designated Landing Location	Old Harvests
Harvest Unit Boundary	BLM-Authorized Roads	BLM
Hard Unit Boundary Line	Road_Type	STATE
Designated Haul Route	Existing	PVT
Temporary Culvert Locations	Re-Open Existing Road	USFS

SMZ/Alt Practice Permitted Area