

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Painted Rocks Timber Permit II
Proposed Implementation Date:	December 15, 2010
Proponent:	State of Montana - DNRC
Location:	E1/2 Sec 16 T2S R22W
County:	Ravalli

I. TYPE AND PURPOSE OF ACTION

The purpose of this action is to remove approximately 130 MBF of trees that have been infected by the Mountain Pine Beetle on 64 acres. A majority of the beetle hit trees are still green and just beginning to show signs of mortality. (see Permit Map Attachment A)

II. PROJECT DEVELOPMENT

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

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

Mike McGrath, DNRC Wildlife Biologist; Paul Moore, DNRC Hamilton Unit Manager; Jeff Collins, DNRC, Hydrologist/Soil Scientist; Chris Clancy, Montana Fish Wildlife and Parks Charles Scripps, adjacent land owner to the project area; Steve Goss, West Fork area landowner.

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

124 Permit – Fish Wildlife & Parks

3. ALTERNATIVES CONSIDERED:

Proposed action and no action.

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.

This project assessment considered the proposed harvest areas and materials on access routes. No unstable slopes or unique geology features are present in the proposed harvest area. Alluvial deposits occur adjacent to Coal Creek and widen into broad alluvial fans on the toeslopes of the West Fork Valley. Soils are predominately deep cobbly sandy loams on the footslopes of 10-40% with cobbly clay loams in the riparian strips adjacent to creeks. These sites are possible frost pockets. The northerly bank of Coal creek is 0-10% slopes with well drained soils that have a longer season of use and supports Lodgepole Pine, Ponderosa Pine and Douglas fir. Soils in the project area are moderate to highly erosive and would require an RMZ adjacent to Coal Creek. Recent salvage operations and fuel reductions have occurred on approximately 55 acres within the DNRC section and ground disturbance and soil impacts were minimal. Approximately 47 acres of previously harvested area are planned for a follow-up salvage operation. Within the area of reentry, a skid trail plan would be used to avoid excessive soil impacts

To protect against erosion, ground based skidding would be restricted to slopes less than 40% on all sites. Operations are planned for winter conditions when soils are protected by snow or frozen ground. The proposed harvest would use primarily existing roads and about 300 yards of temporary road would be built on moderate slopes in proposed unit 1A. The temporary road would be stabilized and slashed following use to control erosion and animal use. Slash will also be placed upon the skid trails where needed for erosion control. Planned ground skidding operations present low risk of direct, in-direct and cumulative impacts based on implementing BMP's, Forest Management Rules and mitigation measures. Mitigations include winter harvest/season of use limits, slope limitations for ground based equipment and retaining a portion of woody debris and slash, well distributed for soil productivity, and prompt revegetation as needed to protect soil resources.

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 proposed salvage permit is located in E1/2 Sec 16 T2S R22W which includes a segment of the Coal Creek watershed that is a class 1 tributary to the West Fork Bitterroot River. MTFWP MFISH waterbody report identifies Coal Creek as supporting rare Bull trout, Westslope Cutthroat Trout, Brook Trout and other minor species. The Upper West Fork Bitterroot River-Painted Rocks watershed is 29,499 acres in size and classified as B-1 in the Montana Water Quality Standards. The headwaters for the river above Painted Rocks Reservoir has been identified as an impaired water body in Montana's 2008 305(b) Report because the stream only partially supports aquatic life and cold water fisheries and no other beneficial uses are listed as impaired. The probable causes of impairment are alteration of stream substrate habitat and sedimentation / siltation. The probable sources of impairment are highway/road/bridge runoff and the West fork Bitterroot River has been classified as category 4A impaired stream, which means that all Total Maximum Daily Load (TMDL) needed have been completed through MTDEQ, with recommendations to restore water quality impairments. Coal Creek is not listed as water quality or temperature impaired. The Coal Creek Road parallels Coal Creek at a well buffered distance through the DNRC ownership. No sediment sources were identified on the proposed harvest boundaries or at the proposed bridge crossing site.

Alternative A There would be no change from existing conditions. Under no action, there is moderate risk of low to moderate levels of increases in water yield in the watershed, and increases in the magnitude and duration of peak flows due to the lodgepole pine mortality and the associated loss of potential evapotranspiration.

Alternative B There is low risk of impacts to water quality, water yield or stream stability from the proposed harvest operations. This is a minor salvage harvest on frozen ground with no ground based equipment operation in the 50 foot SMZ. There is up to ½ mile of Streamside Management Zone adjacent to Coal Creek that would have selective harvest of individual dead and dying trees. Harvest would be limited to one side of the creek along the NE property boundary and on the south side of Coal Creek. Harvest along the south side of coal Creek would harvest less than 25% of the standing trees. No bank edge trees would be removed and the harvest would be almost surgical in nature on frozen ground where the potential for soil disturbance or sediment is low. DNRC would maintain an 85 foot RMZ that would retain adequate snags and stream recruitable trees for large woody debris consistent with the SMZ law and forest management rules. The harvest of dead, dying and beetle infested lodgepole pine is not expected to have a measurable influence on the amount or timing of runoff from the proposed project area when compared to the effects anticipated under no action. Therefore no cumulative effects due to increased water yield are expected on water quality or stream channel stability beyond those that are expected to result from the lodgepole pine mortality already occurring under no action. In summary, the proposed harvest operations present low risk of direct, in-direct and cumulative impacts based on implementing BMP's, and mitigation measures.

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.

Though most of the slash will be chipped, some accumulations of slash will be created at log landings. All burning will be conducted under good dispersion and coordinated through the Montana Air Shed Group to protect Air Quality.

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.

Hollyleaf Clover, a sensitive species in this region is located in the general area but is not located within cutting units. The plant prefers the open, south-facing slopes.

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 impacts. Please see attached Wildlife report – Attachment B.

Fisheries: Coal Creek flows through the DNRC project section and supports rare, Bull Trout, Westslope Cutthroat trout and eastern brook trout (non-native). The Coal Creek road is located away from Coal Creek except for two stream crossings sites that are stable. Coal Creek in good condition and the channel segment through DNRC includes complex habitat components of natural large woody debris and stream shading. As Lodgepole trees in the area are beetle hit and die, we would expect a reduction in tree canopy and stream shading that may result in minor increases water temperatures, similar to the natural range of conditions from tree mortality or periodic fires. Coal Creek is not listed as a temperature limited stream.

Alternative A – Fisheries

No action and no change from existing conditions would occur .

Alternative B – Fisheries No sediment delivery is likely to Coal Creek based on the buffer distance of the road well away from the stream, implementation of SMZ and RMZ boundaries and operations on frozen and snow protected land as noted in the water quality section. One temporary stream crossing is planned using a bridge on a previously used crossing site. The bridge is planned to protect water quality and fish habitat by avoiding stream channel disturbance and to limit sedimentation to Coal Creek. Minor salvage harvest would remove trees along the SMZ. For additional riparian protection an RMZ will be designated consistent with Forest Management Rules, and proposed harvest is considerably less than the maximums allowed by rules or the SMZ law requirements. Trees within the SMZ will be marked and retained for large woody debris recruitment and shading to Coal Creek consistent with SMZ laws and Forest Management Rules. Other tree species such as spruce and Douglas fir plus all understory shrubs will be retained and continue to provide varied amounts of shading and we expect stream temperatures would remain in a natural range of fluctuation. The proposed action would retain adequate large woody debris that may be recruitable to Coal Creek.

The proposed action is not expected to measurably affect fish habitat components that include stream shading, stream temperature, sediment delivery, nutrient supply, channel stability or flow regimes compared to no action. No ground based equipment operations would occur within the SMZ of Coal Creek and minimal ground disturbance is expected with winter harvest operations. Based on the minor harvest, implementation of BMP, rules and mitigations measures outlined, there is low risk of direct, in-direct or cumulative effects to fish habitat or aquatic life with the proposed action.

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.

Although there are T&E species in the area none have been identified in the cutting unit boundaries or in the near vicinity. Please see attached Wildlife report.

Alternative A – Fisheries- No change in effects to fish species over existing conditions in Section 8 is anticipated.

Alternative B – Fisheries- Bull trout and Westslope Cutthroat trout (WCT) are listed as a Class A species of Concern in Montana by the DFWP, Montana Natural Heritage Program and the Montana Chapter of the American Fisheries Society. The DNRC Forest Management Program has also identified WCT as a sensitive species under ARM 36.11.436. No new road construction is planned near streams supporting fish. Based on the implementation of BMP's, Forest Management Rules and mitigations we expect a combined low risk of direct, indirect and cumulative impacts to fisheries including Bull trout and WCT under the proposed action (see Section 8 – Fisheries for more information regarding potential impact to WCT).

Recommended mitigations

- Implement Best Management Practices for all operations.
- Install or restore drainage features on all roads as needed and maintain concurrent with operations.
- Avoid operations on wet/moist soils that may cause compaction. Use existing skid trails and landings where feasible to limit effects to soils and productivity.
- Limit equipment to slopes less than 40% and avoid excessive disturbance that may cause overstocking of regeneration.
- Rip/scarify old road segments to be abandoned and grass seed disturbed roads and landings.
- Off-road equipment must be pressure washed and inspected prior to off-loading to prevent weeds.
- Treat noxious weeds along road and at landings as needed.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

An archeological review was done for the Coal Creek Timber Sale in 1998 and again in 2004 and no known historical, archeological, or paleontological sites are present in the area.

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 visual impacts will be low for a couple reasons. Harvest unit1 is located below the mid slope area on a flat and harvest unit 2 is a light harvest situated in a draw not visible from the West Fork Valley. The proposed project is intended to remove primarily dead and dying trees and will maintain a live residual stand.

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 Identified

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 DNRC is cooperating with the USFS and surrounding private landowners in a fuels reduction project.

<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.

Truck hauling signs will be placed along Coal Creek Road.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

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

No impacts

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.

No impacts

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 impacts

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 impacts

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.

State Forest Management Plan

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.

Hunting, hiking and horseback riding are some of the activities enjoyed by the public on the half section, especially adjacent landowners. The public has access to this tract by way of the Coal Creek Road. The proposed harvest will not affect these 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.

No impact

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

No impact

23. CULTURAL UNIQUENESS AND DIVERSITY:

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

No impact

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.

Minimum expected return: (130 MBF)(5.46 tons/MBF) = 709.8 tons X (\$8.31/T minimum stumpage bid) = \$5,898 + \$3,769 Forest Improvement Fee. No action would result in loss of income to the common school trust.

EA Checklist Prepared By:	Name: Paul Moore	Date: 11-9-2010
	Title: DNRC, Hamilton Unit Manager	

V. FINDING

25. ALTERNATIVE SELECTED:

I find that the environmental assessment (EA) checklist is the appropriate level of analysis for the proposed action. All resources and environmental values pertaining to the proposed action have been properly identified and thoroughly evaluated. Therefore I select the action alternative.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

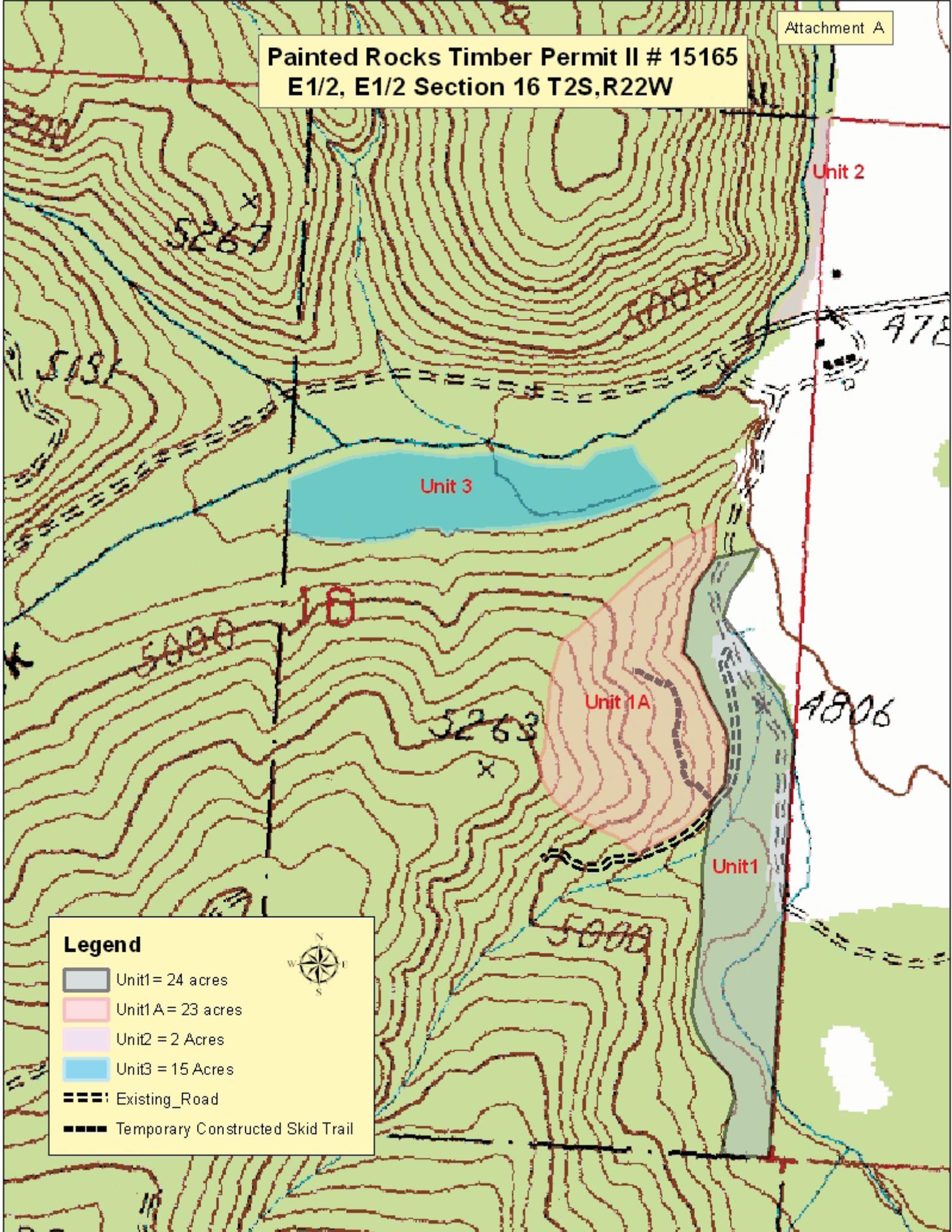
No impact

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS More Detailed EA No Further Analysis

EA Checklist Approved By:	Name: Robert Storer
	Title: Southwestern Land Office, Deputy Area Manager
Signature: /s/ Robert H Storer	Date: November 11, 2010

Painted Rocks Timber Permit II # 15165
E1/2, E1/2 Section 16 T2S,R22W



Legend

-  Unit1 = 24 acres
-  Unit1A = 23 acres
-  Unit2 = 2 Acres
-  Unit3 = 15 Acres

-  Existing_Road
-  Temporary Constructed Skid Trail

