

Porter Mount Management Project

Decision Notice and Finding of No Significant Impact



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Ranger District

Forest Service

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Flathead National Forest

Porter Mount Management Project

Decision Notice and Finding of No Significant Impact

Flathead National Forest
Swan Lake Ranger District
Flathead County, Montana

December 2007

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USDA Forest Service

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PORTER MOUNT MANAGEMENT PROJECT

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SUMMARY OF DECISION

After careful consideration of the Porter Mount Environmental Assessment (EA), the Finding of No Significant Impact (FONSI), comments from the public, and the Project File, I have decided to implement **Alternative B with Modifications**.

The Decision combined portions of Alternatives B and C as presented in the Porter Mount EA. Each unit associated with the action alternatives was considered individually before being retained, dropped or changed. Units were dropped or changed due to concern for fish habitat, wildlife habitat, or in response to public comments. In general, the **Alternative B with Modifications** combines the smaller units associated with Alternative C, with the logging systems and temporary roads associated with Alternative B. In addition, for the specific reasons discussed below, four units were dropped from the Decision, primarily to avoid potential cumulative effects to downstream fish populations off National Forest System (NFS) lands.

I have decided to implement vegetation treatments from a combination of the action alternatives presented in the EA, which consist of:

- Mechanical and non-mechanical harvest treatments on an estimated **1417 acres** removing commercial and non-commercial products totaling an estimated volume of **7.7 million board feet** (MBF). Materials that may be removed include sawlogs, posts, poles, pulp, and chips. Harvest will occur using cable, tractor, and helicopter logging systems.
- Regeneration harvest openings would be less than **40 acres**.
- Ecosystem Burning on an estimated **128 acres**.
- Treatment of an estimated **1089 acres** in the Wildland Urban Interface (WUI).
- Construction of an estimated **0.15 miles** of designated skid road to access harvest units.
- Application of Best Management Practices (BMPs) on an estimated **54.13 miles** of haul roads as required for the Timber Sale Contract.
- Construction of an estimated **4.74 miles** of temporary road to access harvest units.

Management actions are described in detail in this Decision (page 9) and in Appendix 2 (Design Criteria of the Selected Action). My decision authorizes mechanical and non-mechanical treatments of forest

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stands to restore forest health, reduce the intensity and severity of future wildland fires, and provide commercial and personal-use wood products for the local communities.

Project Area

These activities will occur in the Porter Mount Project Area, which lies in the Island Unit Geographic Area of the Swan Lake Ranger District. This block of NFS lands is detached from the rest of the Flathead National Forest and is surrounded by private ownership lands. The Porter Mount Management Project is located southwest of Kalispell, Montana, south of US Highway 2, east of Rogers Lake, northwest of Lake Mary Ronan, and west of Blacktail Ski Area (See Map 1, Vicinity Map). The Porter Mount Project Area (11,431 acres) includes 320 acres of private land. No other ownerships are included within the project area. Elevations within the project area range from 6280 feet at Haskill Mountain to 3440 feet close to Porter Creek. Ponderosa pine, western larch, Douglas-fir, lodgepole pine, subalpine fir, and spruce are the major tree species inhabiting the project area. The legal locations for project activities include T27N, R23W, Sections 26, 27, 28, 32, 33, 34, and 35; T26N, R23W, Sections 2, 3, 4, and 11; T26N, R22W, Sections 7, 8, 17, 18, 19, 20, 29, 30, 31, and 32, Principal Montana Meridian, Flathead County, Montana.

The project area lies within the Wildland Urban Interface (WUI), the highest priority area for hazardous fuels treatment in the National Fire Plan and is within the WUI for the Flathead County Community Wildfire Fuels Reduction and Mitigation Plan.

PURPOSE AND NEED FOR ACTION

The need for the Porter Mount Management Project was derived from the differences between desired landscape conditions and current conditions related to forest health, fuels, and forest products on NFS lands. Several plans and other regulations also provide context to the management direction for these lands. These include the National Fire Plan, the Flathead County Community Wildfire Fuels Reduction and Mitigation Plan, the Healthy Forests Restoration Act, and the Flathead National Forest Land and Resource Management Plan (Forest Plan). The Purpose and Need for Action is discussed in detail on pages 1-2 to 1-4 of the EA.

Based upon the existing condition of the project area, the Swan Lake Ranger District Interdisciplinary (ID) Team and I identified the following management activities to restore desirable vegetative conditions:

Forest Health

- Restore Forest Vegetation Health (restore historical tree species composition, structure, and pattern);
- Reduce the growing risk for insects and chronic disease infestation.

Hazardous Fuels Reduction

- Reduce the associated risk of high-severity landscape wildfire risk within the WUI (as identified in the Flathead County Community Wildfire Fuels Reduction and Mitigation Plan).
- Increase the probability of stopping wildfires on NFS lands before they burn onto private lands.
- Provide commercial and personal-use wood products for the local communities

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PUBLIC INVOLVEMENT

The Porter Mount Management Project appeared in the January 1, 2007, April 1, 2007, June 1, 2007, and October 1, 2007, editions of the USDA Forest Service's Schedule of Proposed Actions (SOPA). This listing informed the public of our plan to analyze the Porter Mount Area for various land management activities. The SOPA list is displayed nationally and locally on the internet sites located at the Forest Service's Washington Office and the Flathead National Forest.

On June 4, 2007, an information flyer explaining the Porter Mount Management Project was mailed out (Project File Exhibit B-4). This mailer, requesting site-specific comments along with a proposed action map, went to approximately 130 individuals, other agencies, and groups.

In addition, a Request for Comments was published in the June 10, 2007, issue of *The Daily Inter Lake*, the Newspaper of Record.

Two field trips were held in July 2007 to a portion of the project area. Sixteen people attended; most were local landowners. Additionally, individual meetings with landowners took place on the ground and in the office. The Swan Lake Ranger District received comments/feedback on the initial proposal from 14 people through letters, phone calls, or e-mails.

The Porter Mount EA was published and made available for public comment on October 6, 2007. Letters and copies of the EA were sent to the mailing list informing them of the availability of the EA. The EA was posted on the Flathead National forest website at http://www.fs.fed.us/r1/flathead/nepa/projects_index.shtml.

A Legal Notice was published in *The Daily Inter Lake* on October 6, 2007 announcing the completion and availability of the Porter Mount EA and a 30-day public comment period on the EA. We received two letters commenting on the EA. These comments were considered in my decision. The letters are displayed in Appendix 4 of this document.

ISSUES

The ID Team reviewed and compiled a list of potential issues based upon comments from the public, organizations, and government agencies. Issues representing an unresolved conflict with the Proposed Action were brought forward as "Major Issues" and were used to help formulate the alternatives to the Proposed Action. Project File Exhibit D-1 provides a detailed description of the issues identified during the scoping process and describes how those issues were accounted for during the analysis process.

Key Issues Used For Alternative Development

Internal and external comments revealed the desire to explore alternatives to the proposed action (Alternative B) which used less temporary road and smaller unit sizes to reduce impacts to specific wildlife and fish species. Alternative C was developed to be responsive to these concerns. More detail relative to those issues follow:

A. Resource Concerns Associated with Temporary Road Construction and the Size and Location of Regeneration Harvest Openings

Temporary Road Construction - There was a concern that the amount of temporary road construction could impact the wildlife, fish, and visual resources. Temporary road construction through old growth habitat would allow potential access by firewood cutters and remove standing snags. There was also a concern that some segments proposed for temporary road construction would be difficult to reclaim, as they were located on steep slopes and seen from Highway 2. Some temporary road locations presented concerns since they were located near ridges, which could affect security for lynx and big

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game species as many species use these high ridge areas as travel corridors. Proposed temporary road construction across one creek in the area also posed a concern due to the possibility of increased risk of sediment flowing into the creek and affecting spawning habitat for brook trout.

Openings - There was a concern expressed that the large regeneration harvest openings could have impacts on wildlife species and the visuals resource. Some harvest units greater than 40 acres in size were proposed for treatment adjacent to old growth stands, which would create an edge influence and interior habitat would be reduced. The edge created would also narrow the connection between different old growth patches. Larger blocks of old growth provide interior habitat and connectivity for old growth associated species. Many of these species are sensitive to the fragmentation caused by regeneration harvest. Some openings larger than 40 acres in size also presented visual concerns due to the amount of past activity seen from Highway 2 and Rogers Lake.

BRIEF DESCRIPTION OF ALTERNATIVES

This section describes and compares the alternatives considered by the Forest Service for the Porter Mount Management Project. The EA considered the proposed action (Alternative B) and two alternatives in detail, Alternatives A and C. Alternative A, the No Action Alternative required by the National Environmental Policy Act (NEPA), served as a baseline to compare action alternatives. Alternative C represents a different way to satisfy the purpose and need by responding with different emphasis to the issues discussed earlier in this Decision Notice.

Alternatives Given Detailed Study

Alternative A – No Action

This alternative represents the existing condition in the Porter Mount Management Project Area. Under this alternative, none of the activities proposed for the Porter Mount Management Project would occur. No vegetative treatments, fuel reduction activities, temporary road and access management, ecosystem burning, or other activities associated with the action alternatives would occur at this time. Ongoing activities such as recreation, public firewood gathering, fire suppression, and normal road maintenance would continue. Activities identified in Chapter 3 of the EA as current and foreseeable actions would occur.

Alternative B – Proposed Action

Intent: Alternative B was developed to respond to the Purpose and Need for the Porter Mount Management Project.

Alternative B focuses on improving forest health and reducing hazardous fuel buildup in the Porter Mount Management Project Area by using various vegetative treatments, both commercial and non-commercial. Features associated with this alternative include the following:

- A total of about **1,434 acres** would receive treatments that would remove commercial and non-commercial products.
- One Clearcut with Reserve Trees Unit (Unit 31) would create an opening larger than **40 acres**; four Seed Tree Units (Units 3, 17, 26, and 51) would create four openings slightly over 40 acres. Regional Forester approval of these openings over 40 acres would be required before making a final decision.
- Ecosystem Burning is proposed on **128 acres**.

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- This alternative treats **1171 acres** in the WUI.
- Approximately **0.15 miles** of designated skid road construction is proposed.
- Best Management Practices would be applied on about **61.46 miles** of haul roads as required for the Timber Sale Contract.
- An estimated **4.74 miles** of temporary road would be constructed to access harvest units.

Alternative C

Intent: Alternative C was developed to address Issue #2, Resource Concerns Associated with Temporary Road Construction and the Size and Location of Regeneration Harvest Openings.

This alternative was developed based upon concerns that the amount of temporary road construction could impact the wildlife, fish, and visual resources. This alternative was also developed based on the concern that large regeneration harvest openings could have impacts on wildlife species and the visual resource. Features associated with this alternative include the following:

- A total of about **1337 acres** would receive treatments that would remove commercial and non-commercial products.
- No regeneration harvest units would create openings larger than 40 acres.
- Ecosystem Burning is proposed on **128 acres**.
- This alternative treats **1123 acres** in the WUI.
- Approximately **0.15 miles** of designated skid road construction is proposed.
- Best Management Practices would be applied on about **63.20 miles** of haul roads as required for the Timber Sale Contract.
- An estimated **0.86 miles** of temporary road would be constructed to access harvest units.

Alternatives Not Considered in Detail

This section discusses two alternatives that were considered, but not given detailed study. These alternatives were initially proposed to address issues identified during the public scoping and ID Team process, but were not considered further for the reasons explained in the following narrative.

Management Actions only in the Community Protection Zone

One organization suggested that we only treat fuels in forest stands within several hundred yards of homes, an approach advocated in a recent paper on the subject of community protection from wildland fire (Nowicki 2002) (Project File Exhibit C-17). The suggestion to limit the project to treatments within a few tens of meters to less than 400 meters from homes was not considered in detail for the following reasons:

- Treating only near individual home sites on a limited basis does not fully meet the intent of breaking up fuel continuity generally within the project area to allow firefighters to more safely, tactically, and strategically address a fire in the interface area. Such an alternative would limit the ability of fire fighting efforts to more effectively and safely fight a fire in the area as a whole.
- Such an approach would leave significant areas of fuel buildup and dense canopies with ladder fuels within the Wildland Urban Interface area. As described above, leaving such stand conditions untreated would limit options that firefighters would have for safely stopping a moving fire within

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the interface area, and would leave many areas where crown fire potential could have been reduced within the urban interface untreated. Bypassing the opportunity to treat such areas would not be consistent with the purpose of the project.

- Research has determined that treatments intended to reduce fuels around communities at risk, rather than individual structures, need to go beyond the home ignition zone (Graham, 2004). While individual home-by-home treatments can help reduce the risk of loss of individual homes, relying solely on such treatments would forego strategic opportunities for controlling fires within this WUI.
- Limiting treatments to a smaller area immediately adjacent to homes or structures would only allow for a small subset of the interface area to be treated in the Project Area. In addition, it would not meet the broader purpose of the proposal in treating fuels in the WUI.
- The proposed fuel reduction treatments are consistent with management actions recommended in the Flathead County Community Wildfire Fuels Reduction and Mitigation Plan (2005) for defensible space around individual homes, reduction of fuels at the neighborhood or subdivision level, and the thinning and biomass removal in the landscape adjacent to WUI to help limit wildfire intensity and rate of spread (Project File Exhibit Q-12).
- An alternative limited to treatment solely within close proximity to homes also would not meet the Purpose and Need to improve and/or maintain the general forest, resiliency and sustainability of stands within the project area. Such an alternative would focus solely on fuel reduction in the immediate vicinity of homes. The Purpose and Need of this project is not limited solely to fuel reduction. This alternative would not address broader forest health and stand conditions, which are an intrinsic part of the purpose and need of this project.

Watershed Restoration Alternative

One organization suggested the Forest Service should include an alternative that removes or fixes all roads with design flaws, are contributing to soil and watershed problems, or are not needed for foreseeable management activities (Project File Exhibit C-17). Also included in the alternative was to bring all streams in the Project Area up to Road Management Objectives (RMOs). This alternative would be beyond the scope of the project.

Other Actions Considered

The ID Team considered permutations of Alternatives B and C, which would have proposed restorative treatment in some old growth stands and fuel reduction within some stands within the WUI that were also within big game winter range.

Upon further consideration and field review, the ID Team concluded that the old growth stands considered were not dry-site old growth, which could clearly be enhanced by the harvest. For this reason, the units were not carried further under any action alternative.

A number of treatment units in white-tailed deer winter range were originally considered within the action alternatives. However, due to the past history of harvest in the area, only a more limited number of units were carried forward within white-tailed deer winter range so as to meet Forest Plan standards for the amount of area managed as functional winter range. Stands within winter range were screened out of all alternatives unless they could be thinned to retain winter range value or were an underburn unit within a stand where thermal cover loss was not an issue due to existing conditions. Additionally, units were carried forward only where the treatments would benefit fuel reduction within the wildland urban interface. Stands not meeting these criteria, within winter range, were not carried forward for detailed consideration in any action alternative.

DECISION

Specifics of the Selected Alternative

As the Responsible Official for the Flathead National Forest, I have selected **Alternative B with Modifications**. My decision modifies Alternative B by incorporating the changes listed below.

Adjustments have been made to Alternative B, such as decreasing the sizes of harvest units, deferring treatment on four units originally included in Alternative B to respond to public comment, and cumulative resource concerns identified through more detailed field reconnaissance. (See Appendix 4 for comments received on the EA and our agency's responses to those comments).

As compared to Alternative B, **Alternative B - Modified** does the following:

- Defers treatment of **Unit 18** due to water quality and fish habitat concerns. After further field verification, this unit was found to contain braided channels and wet areas. Buffering and protection of these areas would have left a limited area for treatment with fairly complex logging systems required. In addition, comments received from Montana Department of Fish Wildlife and Parks on the project re-affirmed the importance of the stream complex in this area relative to grayling production in Rogers Lake. Both the complexity of harvest systems needed to appropriately harvest this unit and because of the additional protection that a reduction of harvest in the watershed above Roger Lake area would mean to this fishery, led me to drop Unit 18 from the decision.
- Defers treatment of **Units 46, 49, and 50** due to fish habitat concerns. These units were in closest proximity to a stream known to contain westslope cutthroat trout. The bulk of the fish habitat on this stream is immediately downstream of NFS lands, on private land where a combination of relatively recent timber harvest and active cattle grazing have left some streambanks vulnerable to potential increased erosion. If this occurred, there could be reduced spawning habitat and pool volume, and possible reductions in habitat connectivity for the cutthroat trout population in Homestead Creek. Though modeling showed relatively low increases in potential water yield due to harvest on NFS lands, I decided the existing streambank conditions on the important reaches on private land warranted deferment of harvest in the three proposed units immediately above this stream reach.
- Incorporates the smaller unit sizes included in Alternative C. This would eliminate the need for consideration of any regeneration harvest over 40 acres in size, and provides the wildlife benefits described, relative to unit placement and size considerations, described in Alternative C in the EA.
- Compared to Alternative B, reduces the size of **Unit 31** from 86 acres to 40 acres and slightly modifies its configuration (compared to Alternative C). This change was to reduce the unit size to retain wildlife and travel corridor cover along the ridgeline above the unit. Additionally, based on further field verification, the changes will configure the unit for better logging feasibility.

Following my review of the ID Team's assessment of **Alternative B-Modified**, I have determined that the changes are minor, consistently result in the same or lesser environmental impact than that disclosed under Alternative B, and are within the scope and context of the environmental effects disclosed in the EA, Biological Assessments (BA), Biological Evaluations (BE), and supporting documentation.

Discussion of specific vegetation management treatments and associated activities of **Alternative B - Modified** are discussed below.

Management Activities Specific to the Selected Alternative

A. Vegetation Management

Commercial Thinning: The existing mature tree canopy closure in the Project Area ranges from 0 to 100 percent with an average closure of 70 to 90+ percent. Within areas to be commercially thinned, the resulting stands will have 40 to 60 percent canopy closure (average 50 percent) within the ground-based and cable units. The target leave basal area will range between 70 to 100 square feet per acre, depending on the species and site. Generally, all dominant and most co-dominant crown classes will be retained, while some co-dominant and generally all intermediate and suppressed crown classes will be removed. The purpose of this treatment is to enlarge the growing space condition of desirable trees, by reducing excessive tree competition for limited site resources, thereby modifying site conditions for improved tree crown and cone development, sustained vigor and growth, and overall forest health. This treatment simulates a low to moderate-severity, mixed-lethal burn. The vast majority of these stands are unmanaged. Some have had past treatment entries. Understory or jackpot burning will be implemented as a secondary fuels treatment to cycle nutrients and restore fire as an ecological process. This treatment will occur on **512 acres**.

Seed Tree Harvest: The existing western larch and ponderosa pine will be retained to provide for seed sources and long-term structure. Approximately 5 to 15 large reserve trees favoring western larch will be designated to remain on site through this rotation. The majority of the Douglas-fir, and all of the lodgepole, will be removed to facilitate regeneration of western larch and ponderosa pine. The majority of trees to be removed are in the co-dominant or intermediate canopy. This treatment is similar to a stand replacement fire regime. Mechanical treatments and prescribed fire will be used to reduce fuels, recycle nutrients, and restore fire as an ecological process. This treatment will occur on **350 acres**.

Salvage Harvest: The existing mature tree canopy will be reduced from the existing average of 70 to 80 percent canopy closure to approximately 50 to 60 percent canopy closure, removing trees primarily in the intermediate and co-dominant canopy. Lodgepole pine and some Douglas-fir will be removed to reduce stand density and fuel loadings. Mechanical treatments to reduce fuels will be implemented on **66 acres**.

Sanitation: The existing overstory of Douglas-fir in some stands is heavily infested with mistletoe. Infested and high-risk trees will be removed and overall stand density will be reduced. Residual species composition would favor non-susceptible trees and canopy closure following treatment will average 50 percent across the stand as a whole. This treatment will occur on **63 acres**.

Sanitation with Pre-Commercial Thinning: The existing scattered overstory of Douglas-fir is heavily infested with mistletoe and will be removed. The remaining stand is comprised of a mixture of western larch, Douglas-fir, and lodgepole pine, primarily sapling and pole-sized trees. Understory trees will be pre-commercially thinned to reduce densities, remove mistletoe infested trees, and reduce fuels. Approximately **13 acres** will have this treatment implemented.

Clearcut with Reserve Trees: The majority of trees will be removed in this treatment, retaining any western larch or ponderosa pine that is present. These stands are primarily lodgepole pine and Douglas-fir, with little species or structural diversity. This treatment is similar to a stand replacement fire regime. Mechanical treatments and prescribed fire will be used to reduce fuels, recycle nutrients, and restore fire as an ecological process. This treatment will occur on **277 acres**.

Thin from Below – Non-Commercial: Trees to be removed will be lodgepole pine, between 2 to 6 inches in diameter. Removal would be primarily by hand cutting with chainsaws, and hand removal. No commercial treatments are feasible. These densely stocked and suppressed stands will not respond to pre-commercial thinning. Approximately **8 acres** will have this treatment implemented.

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B. Fuels Management

Ecosystem Burning: This treatment will occur in stands composed of Douglas-fir, larch, ponderosa pine, and lodgepole pine with mid-elevation shrub and grass fields. The use of prescribed fire in this area will help to reduce natural fuel buildups, reduce wildfire suppression costs, and maintain a healthy, vigorous ecosystem on **128 acres**.

The proposed burn is designed to replicate the role of natural fire (moderately frequent/low intensity fires), in a controlled manner by:

- Slowing the spread of invasive species into these stands and increasing vigor of resulting stands;
- Removing above-ground stems of decadent shrubs and stimulating the root crowns to produce new, vigorous growth;
- Reducing understory stocking of conifer seedlings and saplings;
- Promoting the growth of native grasses and forbs;
- Increasing snag availability for birds and small mammals;
- Reducing natural fuel buildup;
- Reducing ladder fuels to reduce crown fire potential;
- Perpetuating larger diameter ponderosa pine, Douglas-fir, and larch.

C. Road Management

Road Maintenance – Best Management Practices: This is the ongoing upkeep of a road necessary to meet the approved RMOs. The present focus of RMOs is to meet the current BMPs for each road. BMPs required under Timber Sale Contracts must be completed before timber is hauled.

The objectives of road maintenance are to reduce the concentration of sub-surface and surface water runoff, minimize road surface erosion, filter ditch water before entering streams, and decrease the risk of culvert failures during peak runoff events. Maintenance work could include culvert installation, replacement of existing culverts with larger culverts, installation of drainage dips and surface water deflectors, placement of riprap to armor drainage structures, aggregate surface replacement, aggregate placement to reinforce wet surface areas, ditch construction and cleaning where needed, and surface blading to restore drainage efficiency of the road surface. These actions would bring the roads up to current BMP standards, better accommodate traffic, and reduce deferred maintenance needs on approximately **54.13 miles**.

Temporary Road: Temporary roads will be constructed to the minimum standards necessary for log hauling over FDRs on an estimated **4.74 miles**. Temporary road surface width would be limited to truck bunk width plus 4 feet. Temporary roads will be reclaimed following use using drain dips, outsloping, scarifying, seeding, and recontouring. Mileage is an estimate based on preliminary field review of units and will be refined during actual layout.

Designated Skid Road: Skid roads will be constructed for forwarding logs with a tractor from the felled location to a landing, where they are loaded on trucks and hauled away. This will occur on an estimated **0.15 miles**. In some instances, it may be necessary to have a designated skid road outside of the unit boundary a short distance to a nearby landing location adjacent to the haul route. Skid roads will be reclaimed following their use using drain dips, outsloping, scarifying, seeding, and recontouring.

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A summary of the vegetation, fuels, and road management activities and a map of the Selected Alternative (Map 2) are located in Appendix 1 of this Decision Notice.

D. Resource Enhancement Projects

To improve other resource values within the Porter Mount Project Area, Resource Enhancement Projects were identified during project design are shown in Table 1. Please refer to Map 3 in Appendix 1 for a display of the project locations.

Several sources of funding exist for resource enhancement projects. Many items have the potential for funding with Knutson-Vandenberg (KV) funds, while congressionally-approved funds or Stewardship dollars would fund other items. Implementation would be based on annual budgets and program direction. These projects are not necessary to mitigate impacts of the proposed action, but are specific resource enhancements within the Project Area that would be beneficial to a variety of resources. If funding were not available, the project improvements would not be accomplished. Table 1 presents the identified opportunities to improve fish habitat, riparian conditions, and wildlife habitat.

**TABLE 1.
RESOURCE ENHANCEMENT PROJECTS**

Ground Location	Enhancement Project
FDR #5380, FDR #5382, FDR #5371, and FDR #5376. All within "Homestead Creek," tributary to Upper Mount Creek.	Complete BMP improvements on these roads (or portions of roads) that are not on a haul route. Keep road on system, but if existing culvert is causing resource damage, remove or replace the culvert. These actions would help reduce impacts to sensitive cutthroat trout population downstream.
FDR #10501, Section 2, below private land.	Replace culvert at risk of failure due to increased flows flowing primarily from private lands upslope.
Shrub Planting in Units 20, 21, 23, 24, 31, 43, and 47	140 acres of shrub planting to improve wildlife habitat

E. Design Criteria

Appendix 2 describes the Design Criteria applied to this project to protect resources.

F. Monitoring

Monitoring and evaluation compares the end results being achieved to those projected in the Forest Plan. Monitoring is conducted on a sample basis to evaluate the overall progress in implementing the Forest Plan, the assumptions on which the Forest Plan is based, and to provide a feedback loop for determining effectiveness of project and mitigation implementation (USDA Forest Service, 1987a). For this project, monitoring and evaluation will be conducted as described in Appendix 3. Those monitoring components not specifically discussed in this appendix tier to the monitoring described in the Forest Plan.

RATIONALE FOR THE DECISION

My criteria for making a decision on this project was based on:

- Achievement of the project's Purpose and Need,
- Relationship to environmental and social issues and public comments received.

Meeting the Purpose and Need

The Porter Mount Area was selected for this project because of the existing forest stand and fuel hazard conditions. We know from past analyses (Island Fuels EA and the Island Unit Ecosystem Analysis at the

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Watershed Scale) that forest stands in the Project Area and throughout the Island Geographic Unit of the Swan Lake District often have higher tree densities in multiple canopy layers than what commonly existed historically, primarily due to fire exclusion over the last century. Ponderosa pine and western larch are a minor component of forest stands due to closed canopy conditions and lack of disturbance. The understory canopy layers are competing with trees in the overstory providing ladder fuels and fuel loadings that have the potential to support stand-replacing fires. Competition for moisture is reducing the vigor and resilience of the dominant overstory trees, resulting in poor growth, increased susceptibility to insects and disease, and increasing mortality.

Insects and disease have also led to mortality and greater fire hazard in many areas of the forest. Mountain pine beetle infestations were experienced in the lodgepole pine in 1980 and 1981, and again between 1986 and 1989. Mortality was limited to patches and individual larger lodgepole pine trees, which were attacked and killed. These trees are now mostly on the ground contributing to fuel loadings in the stands affected. Mountain pine beetle continue to kill individual trees and small groups of trees within many stands. Many of the larger Douglas-fir trees throughout the project area are being affected by mistletoe and root rot. Root rot weakens the defense mechanisms of affected trees, which increases the risk of insect infestation, primarily by bark beetles. This risk is increasing in the area. Mistletoe in the Douglas-fir is scattered throughout the project area, and where past harvest activities have retained overstory Douglas-fir, these trees are heavily infected. These stand and fuel conditions increase the risk of fires moving from the forest floor to tree crowns, making fire suppression an almost impossible task.

Another reason the Porter Mount Area was selected for this project was to reduce the effects that a future wildland fire may have on property and resource values, and provide better assurance that human life would be protected within and near the project area. Because of the rapid growth in the Flathead Valley, a substantial increase in the number of people living in close proximity to NFS lands has occurred. Hazardous fuel reduction is one of the key points of the National Fire Plan, which emphasizes management in dense forest vegetation that is the result of decades of fire exclusion, particularly within WUI areas. The majority of the Porter Mount Project Area lies within the WUI as identified by the Flathead County Community Wildfire Fuels Reduction and Mitigation Plan. The threat to life and property from high forest fuel hazards was unfortunately illustrated once again during the 2007 fire season in forestlands near the Flathead Valley, other parts of Montana and other western states.

The third reason the Porter Mount Area was selected for this project is that the management of this area has the potential to affect local economies. Use of resources and recreational visitation to the Forest generate employment and income in the surrounding communities and generate revenues that are returned to the Federal Treasury. The Porter Mount area largely lies within the suitable timber base under the Forest Plan within Management Area 15 (MA-15). MA-15 is to be managed, in concert with other resource objectives, to emphasize sustained growth and yield of forest products.

I did not select the No Action Alternative because this alternative does not address the concern of forest health, the risk of high severity wildfires in the WUI, nor would it provide forest products to the local economies. No action would mean forest canopies within the project area would continue to become denser and more closed in, and surface and ladder fuels would continue to accumulate. Ponderosa pine and western larch would continue to decline, leading to reductions in this forest type. Regeneration of ponderosa pine and western larch would be inhibited due to the increased shading within the stands and lack of disturbance. Increasing insect or disease-related mortality would add to the existing fuel load accumulation. Natural fuels would accumulate faster than they are recycled, increasing the natural fuels hazards near private lands. The risk of stand-replacing fire would increase as long as these stand conditions persisted. The high fire resiliency of once open canopy/open grown forests would also be lost. Selection of the No Action Alternative would be inconsistent with the Purpose and Need for this project. Based on the environmental analysis, the long-term effect of selection of the No Action Alternative would likely yield greater adverse social and environmental affects than would the Selected Alternative.

I did not select the unit configurations presented in Alternative B because of the potential effects from the creation of openings over 40 acres on the resources identified above, although it would have treated

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more stands to improve forest health and reduced fuels on more acres than the Selected Alternative. The purpose and need for action and the desired conditions for the Porter Mount Area are based on Forest Plan goals, objectives, and standards. Based on the analysis in the EA, I did not select the minimization of temporary roads described in Alternative C, primarily because the EA demonstrated that the temporary roads described in Alternative B had very limited negative environmental affects as designed. In many cases, the temporary roads to be used would use existing road templates, which would require little excavation or are in locations with very stable soils and generally dry conditions with few stream crossings. Impacts to water quality under either alternative were very limited. The most site-specific fisheries issues in the project related to specific unit placements and were not tied to temporary road construction or use. The four units that have been dropped (see previous discussion on the Selected Alternative) coupled with Design Criteria shown in Appendix 2, address these site-specific issues.

Given that the environmental analysis done for this project indicated relatively low impact from temporary roads, I considered that Alternative C's reliance on significantly more expensive helicopter harvest (and few temporary roads) was not warranted. Coupling the reduced unit sizes in Alternative C with the logging and transportation system in Alternative B appears to be the best balance of environmental protection and economic feasibility and benefit. I believe the Selected Alternative, as described in this decision, best meets the Purpose and Need for the Porter Mount Project while also being responsive to resource issues, and public input identified through the analysis process.

My decision to select **Alternative B with Modifications** will create sustainable forest conditions by improving overall stand health. Growing space, individual tree vigor, and the ability to withstand insect and disease will be improved in treated stands. Better opportunities for ponderosa pine and western larch regeneration will result from the creation of more open stand conditions. In addition to creating sustainable forest conditions, I believe my decision will reduce potential fire intensities and improve the opportunity for fire suppression, and lessen the potential for fires on Federal land to ignite private structures. The estimated **7.7 million board feet** of timber resulting from these management activities will be provided to the local communities.

As summarized in the Table 2, **Alternative B with Modifications** is responsive to the Purpose and Need for the Porter Mount Management Project.

**TABLE 2.
COMPARISON OF ALTERNATIVES – HOW THEY RESPOND TO THE PURPOSE AND NEED**

Purpose and Need Statement	Alt. A	Alt. B	Alt. C	Alt.B Mod
Forest Health				
To restore and maintain Forest Vegetation Health (restore historical tree species composition, structure, and pattern) (Indicator: Acres treated – Commercial Thinning, Seed Tree, Salvage, Sanitation, Sanitation with Pre-Commercial Thinning, Clearcut with Reserve Trees, Thin from Below – Non-Commercial)	0	1434	1337	1417
Reduce the growing risk for insects and chronic disease infestations (Indicator: Hand Planting of resistant tree species (primarily ponderosa pine and larch))	0	601	540	540
Hazardous Fuels Reduction				
Reduce the associated risk of high-severity landscape wildfire risk within the Wildland Urban Interface as identified in the Flathead County Community Wildfire Fuels Reduction and Mitigation Plan (Indicator - Acres within WUI).	0	1171	1123	1089
Increase the probability of stopping wildfires on NFS lands before they burn onto private lands.	No	Yes	Yes	Yes
Provide Wood Products for Local Economies				
Timber Harvest Acres	0	1434	1337	1417
Timber Harvest Volume (MMBF)	0	8634	8041	7672

Consideration of the Issues and Public Comments

In addition to the Purpose and Need, I also considered how well each alternative responds to the issues:

- Temporary road construction and
- Openings over 40 acres.

The following section summarizes how I believe my decision responds to issues identified in the EA and how it responds to more comments and concerns I received on the project.

A. Miles of Temporary Road Construction

No comments were received on the EA concerning the amount of temporary road construction proposed in Alternatives B or C. One comment was received that was in general support of Alternative B.

As discussed in the Economics Section of the EA, during 2006, most wood product prices saw a sharp decrease due to a decline in the U.S. housing market. Prices fell even further in 2007, based on information from the Western Wood Products Association and the Bureau of Business and Economic Research at the University of Montana. When comparing alternatives, Alternative B yields a higher revenue than Alternative C due to less reliance on more expensive helicopter yarding. The alternative with less helicopter yarding would indicate a higher degree of sale viability under more market conditions.

As stated above, the temporary roads to be used were found to be on stable, dry soils with few stream crossings. All temporary roads and skid roads will be reclaimed by removing any installed culverts or temporary bridges, by placing large woody material on the template (where that material is available), and by seeding with the native plant mix as specified by the Forest Botanist. In addition, all newly constructed temporary and skid roads will include re-contouring the entire road template to the natural ground contour, and to the extent feasible, placing the top soil back on the soil surface.

After reviewing the results of the effects analysis in the EA and identified Design Criteria (Appendix 2) that will be implemented to protect resources, I have determined that my decision to use these temporary and designated skid roads to access harvest units is environmentally acceptable and responds to issues expressed by the public.

B. Regeneration Harvest Openings over 40 acres

No comments were received on the EA concerning regeneration openings over 40 acres. As discussed earlier, concerns were expressed internally that regeneration openings could have impacts on wildlife species and the visuals resource. I considered this in my selection of Alternative B as the Selected Alternative. As with Alternative C, **Alternative B - Modified** does not propose any openings over 40 acres.

The Selected Alternative used unit sizes and configurations developed in Alternative C in part to offer additional protections to water quality and fish habitat. Some commentors cited the need to reduce impacts to riparian areas associated with fish habitat. My decision includes the deferment of Units 18, 46, 49, and 50 to meet these concerns. My decision protects water quality and fisheries habitat while meeting the Purpose and Need and responding to public comments.

Table 3 displays the comparison of the action alternatives in responding to the issues.

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**TABLE 3.
COMPARISON OF ALTERNATIVES AND HOW THEY RESPOND TO THE KEY ISSUES**

Key Issues	Alt. A	Alt. B	Alt. C	Alt. B Mod
Resource Concerns with Temporary Road Construction and Harvest Openings over 40 Acres affecting Wildlife, Fish, and Scenery Resources.				
<u>Indicators</u>				
Miles of Temporary Road Construction	0	4.7	0.8	4.7
Regeneration Harvest Openings over 40 acres	0	5	0	0

C. Other Comments Received During Scoping

Two responses to the EA were received during the comment period. The issues raised in those responses are addressed in more detail in Appendix 4 of this document. My decision addresses these specific comments as follows.

Winter Range: One comment was received which pointed out that portions of the project area are within whitetail deer winter range and asked that the decision consider effects to this habitat. In this project area, many potential treatments within the WUI, especially those closest to private property, are in MA-9 – White-tailed Deer Winter Range. **Alternative B - Modified** meets Forest Plan direction for Big Game Winter Range and maintains thermal cover while still accomplishing forest health, and fuels reduction objectives. A more extensive discussion of the criteria used to select units within MA-9 is given in the “Alternatives Not Considered in Detail” Section above.

Rogers Lake Grayling: One comment was received that pointed out the connectivity of specific units to a small stream that is tributary to Rogers Lake and is used by grayling for spawning. This stream was discussed in the EA and based on input from the District Fish Biologist, as well as this comment, the decision was made to drop Unit 18 from the decision. In addition the specific Design Criteria in Appendix 2 require that the stream will be completely buffered for 150 feet (both sides) within Units 15 and 17. Additionally, under the Selected Alternative a portion of Unit 17 has been modified from a Seed Tree harvest to a Commercial Thin (and is now designated as Unit 53).

Homestead Creek: One comment noted that this stream was shown as intermittent but should be shown as perennial. The District Fish Biologist also made this observation and was analyzed within the EA as a perennial stream. In response, the map for the Selected Alternative shows the stream as perennial. Most significantly, the three units adjacent to Homestead Creek have been deferred for the fishery related reasons discussed in more detail in the “Specifics of the Selected Alternative” Section of this decision.

Economics of Helicopter Harvest: One comment was received that supported the selection of Alternative B, but expressed concern over economic viability of the small amount of helicopter yarding involved. The Selected Alternative contains two units, portions of which may require helicopter harvest. Actual inclusion of the limited acreage requiring helicopter harvest in the project offering would likely be optional if current market conditions exist at the time of offer. However, my decision includes the helicopter portions of two units to authorize the option of their inclusion in the project.

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Summary

I selected **Alternative B - Modified** over the other action alternatives primarily because it best meets Forest Plan direction while meeting the Purpose and Need for action in the most economically viable fashion. At the same time, it responds to public comments and desires and implements direction from the National Fire Plan.

Current fuel and forest health conditions in the Porter Mount Area can move towards historical conditions by applying appropriate management actions. The most cost-efficient method of meeting the Purpose and Need objectives involves commercial timber harvest and ecosystem burning. The majority of treatments will occur within the WUI helping to reduce the risk of fires adjacent to private property. Timber sales are expected to be sold in **2009**. It is anticipated that timber harvest will be completed within 2 to 3 seasons after the sale date. Implementation of roadwork associated with timber sales should begin once the project is awarded. Reforestation activities will be completed no more than 5 years after logging is completed. Management activities not involving timber harvest (Ecosystem Burning) could begin in 2008.

FINDING OF NO SIGNIFICANT IMPACT

In accordance with CFR 1508.13 and direction provided in the Forest Service Handbook (FSH 1909.15, Chapter 40, Section 43.1), I have determined that the management actions included in the Selected Alternative – **Alternative B with Modifications** of the Porter Mount Project do not constitute a major Federal action, and that the implementation of the Decision will not significantly affect the quality of the human environment. Accordingly, I have determined that an Environmental Impact Statement (EIS) need not be prepared for this project. I have followed the implementing regulation for NEPA (40 CFR 1508.27) and other criteria for determining the significance of effects.

Before making my determination, I carefully reviewed and considered the following information:

- The direct, indirect, and cumulative effects of these actions as documented in the EA for the Porter Mount Management Project;
- The analysis documentation in the Project File for the Porter Mount Management Project;
- Comments received during all scoping and after the EA was published for this project;
- Past experiences with forest health and fuel reduction projects on the Flathead National Forest.

The ID Team and I have “screened” the management actions included in the Porter Mount Management Project for “significant impact.” The results of this screen are summarized on the following pages.

Significant, as used in NEPA, requires consideration of both context and intensity.

Context means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short-term and long-term effects are relevant (40 CFR 1508.27).

The effects of the proposed actions are limited in context. The project area is limited in size (**1417** acres of mechanical treatments and **128** acres of ecosystem burning treatments) and the activities are limited in duration. Timber sales are anticipated to be sold in **2009**. It is anticipated that timber harvest will be completed within 2 to 3 seasons after the sale date. Implementation of roadwork associated with timber sales should begin once the project is awarded. Reforestation activities will be completed no more than 5 years after logging is completed. Management activities not involving timber harvest (Ecosystem Burning)

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could begin in 2008. This burn would be dependent on appropriate burning conditions and though it would only take one to two days to complete, for the purposes of this analysis it is assumed that it would be completed by 2019. Effects are local in nature and are not likely to significantly affect regional or national resources.

Many of the treatment units are located adjacent to private property and homes. As such, the forestland surrounding these private lands will be affected by this decision. The people most affected by the project will be the local residents on the adjacent lands. This action is also a continuation of forest health and fuel reduction projects that have occurred for many years on the Flathead National Forest and elsewhere across the Northern Region and the nation as a whole. Short-term adverse effects will be mitigated through implementation of the Standards and Guidelines in the Flathead's Forest Plan, BMPs (Appendix 2), and the Design Criteria (Appendix 2) developed specifically for this project.

The project Design Criteria minimize and avoid adverse impacts to the extent that such impacts are almost undetectable and immeasurable, even at the local level. These Design Criteria include, but are not limited to the following:

- Protection of the soil resource;
- Protection of leave trees,
- Control of noxious weed spread,
- Protection of sensitive or threatened plant species;
- Protection of riparian habitat;
- Retention of snags and woody debris for wildlife,
- Protection of threatened, endangered, or sensitive wildlife species,
- Seasonal and operational restrictions to avoid impacts to wildlife populations and habitat;
- Reclamation of temporary roads; and
- Protection of Heritage Resources.

Within the context of the landscape as a whole, or at the stand level, the ecological consequences are not found to be significant in the short- or long-term.

Intensity refers to the severity of impact. Responsible Officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following ten aspects are considered in the evaluation of intensity (40 CFR 1508.27):

1. Impacts may be both beneficial and adverse. A significant effect may exist even if the balance of effects will be beneficial.

Both beneficial and adverse effects have been taken into consideration when making a determination of significance. While there will be beneficial effects, this action does not rely on those effects to balance adverse environmental impacts. Detailed Specialist Reports, included in the EA and Project File, contain comprehensive effects analyses and the findings from these resource specific reports form the basis for my decision.

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It is my determination, based on review of these analyses and consultation with Specialists that the Selected Alternative, including vegetation management, fuels management, and road management activities will not have a significant impact on the environment. All effects will be small or short-lived. None is deemed irreversible or irretrievable and do not set in motion further effects. The EA, Specialist Reports, and BAs/BEs evaluated all potential direct, indirect, and cumulative effects.

2. The degree to which the Selected Action affects public health or safety.

The forest health and fuel reduction treatments are designed to increase the efficiency of fire suppression efforts and reduce risks to firefighters, local residents, the public, structures, and natural resources. The implementation of these treatments will result in improved community safety because fuel reduction will increase the chance of suppressing a fire before it reaches private property. All burning of thinning slash and natural fuels will comply with State Air Quality Standards and be coordinated through the Montana Airshed Group. Dust from timber hauling activities will be controlled using the dust abatement requirements within the Stewardship or Timber Sale contract provisions.

Herbicide treatments of weeds will comply with label directions and in accordance with and under decision authority of the Flathead National Forest Noxious and Invasive Weed Control EA and Decision Notice (USDA May 2001), to which the Porter Mount Project EA tiers.

Project Design Criteria were developed to address public safety concerns associated with proposed harvest and association actions (See Appendix 2). I believe that the Selected Action is not likely to have any significant impact to public health or safety.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The Porter Mount Project Area does contain botanical sites that were identified through field reconnaissance. Impacts to these sites will be avoided during project layout and under contract provisions for vegetation treatments (Design Criteria, Appendix 2).

Heritage Resource Surveys have been completed and no previously undiscovered sites within the project area boundaries were found. The project area includes wetlands and riparian areas, but impacts to wetlands and riparian areas will be avoided during project layout and under contract provisions for vegetation treatments (See Design Criteria, Appendix 2).

Based on this information, I conclude that the Selected Alternative will have no effects on unique resources.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

Based on the limited context of the project, my review of comments received during the scoping of this project, and the analysis documented in the EA and Project File, I do not find any highly controversial effects to the human environment.

I conclude that the effects of the Selected Alternative are not considered highly controversial by professionals, specialists, and scientists from associated fields of forestry, wildlife biology, soils, fisheries, and hydrology.

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5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

Based on my review of comments received during the scoping of this project, the comments received after the publication of the EA, and the analysis documented in the EA and Project File, I find the possible effects on the human environment that are uncertain or involve unique or unknown risks are minimal or non-existent.

Given the nature of the trees and lesser vegetation to be removed and the large proportion to be left, the effects to the quality of the human environment are not significant. The agency has considerable experience in such projects and the consequences of such actions are well established and predictable.

A technical analysis (EA and Project File) that discloses potential environmental impacts (which is supportable with use of accepted techniques, reliable data, and professional opinion) has been completed, and I believe that the impacts of implementing this decision are within the limits that avoid thresholds of concern.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The Porter Mount Management Project represents a site-specific project that does not set precedence for future actions or present a decision in principle about future considerations. Any proposed future project must be evaluated on its own merits and effects. The Selected Action is compatible with the Forest Plan and the capabilities of the land. I believe that this action does not represent a decision in principle about a future consideration.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

Connected, cumulative, and similar actions have been considered and included in the scope of the analysis. The analysis accounts for past, present, and reasonably foreseeable actions of the Forest Service, Montana Department of Natural Resources and Conservation, private timber companies, and private landowners within the project area (EA, Chapter 3 and Resource Cumulative Effects Worksheets in the Project File).

Based on my review of the analysis and disclosure of effects in the EA, Specialist Reports, BAs/BEs, and other analyses in the Project File, I conclude that the Porter Mount Management Project does not represent potential cumulative adverse impacts.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

My decision to approve this project will not have adverse effects on, nor cause the loss or destruction of, significant scientific, cultural or historic resources.

Heritage Surveys have been completed in the Porter Mount Project Area and no previously undiscovered sites within the project area boundaries were found (Project File, Section N, and the Porter Mount EA (pages 3-187 through 3-190). The potential for influencing undiscovered sites is mitigated by compliance with Forest Plan standards and guidelines, and through the Design Criteria

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included as part of the Selected Action (Appendix 2). In the event such resources are discovered during project implementation, they will be evaluated and protected.

I believe that this action will not have a significant effect on scientific, cultural, or historical resources.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

No threatened or endangered species or its habitat is likely to be adversely affected by the implementation of the Selected Action. Biological Assessments for threatened and endangered species have been completed for this Decision and are in the Project File. These BAs and supporting documentation led to the following determinations for listed species.

Table 4.
Threatened & Endangered Species Determinations

Species	Determination
Grizzly Bear	No Effect
Gray Wolf	No Effect
Canada Lynx	May affect – not likely to adversely affect.
Bull Trout	No Effect
Spalding's Catchfly	No Effect
Water Howellia	No Effect

10. Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.

As described in the EA (Regulatory Framework and Consistency sections for each resource area in Chapter 3), the Selected Action is consistent with all applicable Federal, state, or local laws or requirements imposed for the protection of the environment, including:

- The National Forest Management Act (NFMA)
- The National Environmental Policy Act (NEPA)
- The Endangered Species Act
- The Clean Water Act and Montana State Water Quality Standards
- The Clean Air Act
- The Migratory Bird Treaty Act
- The National Historic Preservation Act
- The American Graves Protection and Repatriation Act
- American Indian Religious Freedom Act
- The Environmental Justice Act
- The Healthy Forests Restoration Act

The Selected Action is consistent with Forest Plan direction.

I have concluded that the Selected Action does not violate any federal, state or local laws or requirements imposed for the protection of the environment.

FINDINGS REQUIRED BY LAW, REGULATION, AND AGENCY POLICY

The Porter Mount Management Project EA addressed the regulatory framework and consistency by resource area. I have determined that my decision is consistent with the laws, regulations, and agency policies related to this project. The following summarizes findings required by major environmental laws:

THE NATIONAL FOREST MANAGEMENT ACT (NFMA)

The NFMA and accompanying regulations require that several specific findings be documented at the project level. These are:

A. Consistency with Forest Plan

The Flathead National Forest Land and Management Plan of 1986 (Forest Plan) establishes management direction for the Flathead National Forest. This management direction is achieved through the establishment of Forest-wide goals and objectives, standards, and guidelines. Additional goals and accompanying standards and guidelines have been established for specific Management Areas across the forest. Project implementation consistent with this direction is the process in which desired conditions described by the Forest Plan are achieved. The NFMA requires that all project-level resource plans, such as this Decision Notice, are to be consistent with the Forest Plan (16 USC 1604 (i)). The EA displays the Forest Plan and Management Area goals and objectives and the standards and guidelines applicable to the Porter Mount Area (EA, Chapters 1, 2, and 3). The alternative development process is detailed in Chapter 2 of the EA and in the Project File, while the management goals and the environmental consequences of the alternatives in relation to the Forest Plan standards and guidelines are displayed in Chapter 3 of the EA. The activities authorized in Alternative B- Modified are consistent with Forest-wide goals, objectives, standards, and guidelines, and specific MA goals and standards.

B. Suitability for Timber Production

The NFMA directs that no timber harvesting shall occur on lands classified as not suited for timber production pursuant to 36 CFR 219.14(a) except for salvage sales, sales necessary to protect multiple use values, or activities that meet other resource objectives on such lands if the Forest Plan establishes that such actions are appropriate [36 CFR 219.27(c)(1)].

Stands proposed for harvest treatment in the Porter Mount Project Area were examined for suitability in accordance with 36 CFR 219.14. Inclusions of non-suitable land were identified within stands proposed for harvest (such as wet areas), and no treatment would occur in these areas. I believe that the remaining portions of these stands are suitable for timber production based on the following:

- Meet the definition of forestland as described in 36 CFR 210.3
- Technological feasibility exists to ensure soil productivity and watershed protection. All sites considered for treatment would use established harvesting and site preparation methods. Resource protection standards in the Forest Plan, project Design Criteria (Appendix 2) and applicable BMPs (Appendix 2) would be sufficient to protect soil and water resource values.
- None of the stands considered for harvest have been withdrawn from timber production as specified in 36 CFR 219.14(4).

c. Clearcutting and Even-aged Management

When timber is to be harvested using an even-aged management system, a determination that the system is appropriate to meet the objectives and requirements of the Forest Plan must be made. Where clearcutting is to be used, it must be determined to be the optimum harvest method [16 USC 1604(g)(3)(F)(i)].

1. **Determination that, where used, clearcutting is the optimum method:** Clearcutting is planned under the Selected Alternative. A Certified Silviculturist documented the rationale for this method; this documentation can be found in Project File Exhibit G-3.
2. **Determination that even-aged management system is appropriate to meet the objectives and requirements of the Forest Plan:** Silvicultural site-specific prescriptions for the Porter Mount Management Project have been prepared by a Certified Silviculturist and reviewed by the ID Team Members. Target stand conditions were developed based on management objectives and site characteristics. The prescriptions considered existing stand conditions, the target stands, and resource constraints in determining the biological and technological feasibility of all silvicultural systems, including uneven-aged systems, and their appropriateness for the site.

After reviewing the silvicultural information in the Porter Mount Project, along with the site-specific management objectives developed from the Forest Plan direction, I have determined that the management practices described in the Vegetation Section of the EA and supporting documents (Project File Exhibits G1 and G-3) are appropriate methods to achieve the multiple resource objectives on the sites selected for harvest.

D. Vegetative Manipulation

The activities included in my decision comply with the requirements under 36 CFR 219.27(b) in regard to altering vegetative tree cover. I have determined that the management practices in the Porter Mount Project shall:

1. **Be best suited to the multiple-use goals stated in the Forest Plan for the area.** These goals are stated in the EA within Chapters 1 and 3. Based upon review of pertinent information from the EA, ID Team Field Review, the Project File, and the comments I received, I have determined that the Selected Alternative, compared to the No Action and other action alternatives, is best suited to meet these goals.
2. **Ensure that the lands can be adequately restocked as provided in 36 CFR 219.27(c)(3)"...assure that the technology and knowledge exist to adequately restock the lands within 5 years after final harvest" (16 USC 1604(g)(E)(ii)).** An estimated 541 acres will be planted in Seed Tree and Clearcut with Reserve Tree Units. Site conditions in these units lead me to believe that adequate stocking will be achieved on these sites.
3. **Management prescriptions shall not be chosen primarily because they would give the greatest dollar return or the greatest output of timber.** My decision to implement the Porter Mount Project is based on a variety of reasons discussed elsewhere in this Decision Notice. Economics was only of the many factors I considered in making my decision; the decision is not based primarily on the greatest dollar return, but rather reducing hazardous fuels and the vulnerability of the forest to large scale, dramatic disturbances.
4. **Management prescriptions shall consider the effects on residual trees and adjacent stands.** In making my decision, I did consider the effects on residual trees and adjacent stands as discussed in the EA on pages 3-37 thru 3-44. I find the selected stand treatment methods and the Design Criteria as listed in Appendix 2 of this decision document are

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adequate to protect reserve trees and adjacent stands near timber harvest and prescribed burning treatment areas.

5. **Management prescriptions shall avoid permanent impairment of site productivity and ensure conservation of soil and water resources.** The Selected Alternative will avoid impairment of site productivity. This determination is supported by the disclosures in the EA on pages 3-9 through 3-32 and 3-91 through 3-100, the application of Design Criteria and the application of BMPs (Appendix 2) to prevent the loss of soil.
6. **Management prescriptions shall provide the desired effect on water quantity and quality, wildlife and fish habitat, regeneration of desired tree species, forage production, recreation use, and aesthetic values.** The information provided in the Project File documents that the vegetation management treatments included in my decision will achieve the desired forest vegetation conditions described in the EA, Chapter 3 (Vegetation Section) and the Silviculturist Report (Project File Exhibit G-3). After reviewing the social and environmental effects of the alternatives (EA Chapter 3), I have determined that my decision is consistent with Forest Plan direction for the management of natural resources, including water quality/quantity, wildlife and fish habitat, recreation uses, aesthetic values, and other resource yields.
7. **Management prescriptions shall be practical in terms of transportation and harvesting requirements, and total cost of preparing, logging, and administration.** Alternative B – Modified is a practical selection. The specified transportation and harvesting systems to be used in the implementation of this decision have been analyzed in combination with the other requirements of the management prescriptions. Implementation of the project will not require significant investments in roads, since a road system is already in place. The preparation, logging, and administration are practical for achieving the resource objectives and progress toward the desired future condition in the project area. The economic analysis included in the EA Chapter 3, along with its supporting documentation in the Project File, demonstrates this finding.

E. Roads

The NFMA requires that the necessity for roads be documented, and that road construction be designed to "standards appropriate for the intended uses, considering safety, cost of transportation, and impacts on land and resources" [36 CFR 219.27(10)]. NFMA also requires that "all roads are planned and designed to re-establish vegetation cover on the disturbed areas within a reasonable period of time, not to exceed 10 years....unless the road is determined a necessary permanent addition to the National Forest Transportation System" [36 CFR 219.27(11)].

Management actions associated with the Porter Mount Management Project do not include the construction of specified permanent roads. An estimated 4.74 miles of temporary roads will be constructed and reclaimed after their use (See Design Criteria, Appendix 2) to access treatment units. I believe that we have met the intent of 36 CFR 219.27(10) and (11).

F. NFMA Viability

The Forest Plan directs the Forest Service to manage wildlife habitat to maintain viable populations of existing native and desired non-native species in the project area. Based upon consideration of these components of the Forest Plan, the Monitoring Plan and Design Criteria of the Decision, an analysis of effects of the Porter Mount Project at the Forest and Regional Scales, and the BAs (Project File Exhibits F-10, F-11, H-1, H-2, L-1, and L-10), I conclude that my decision poses little risk to the viability and distribution of native species.

Porter Mount Management Project
Decision Notice and FONSI

THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

National Environmental Policy Act provisions have been followed as required by 40 CFR 1500. The Porter Mount Project Decision Notice complies with the intent and requirements of the NEPA.

Scoping for the project included public field trips and meetings, a mailing that provided information about the project and solicitation for comments, and public notices (legal advertisements), and a public review period on the EA. Issues identified during the initial scoping for the Porter Mount Project assisted the ID Team and me in project design and with the analysis process. Project File Section C contains the comments received on this project.

Project File Exhibit D-1 provides a summary of Forest Service responses to issues identified during the scoping of the project, and Appendix 4 of this DN provides my responses to issues identified during the comment period. This DN describes the decisions I have made and my rationale for making the decisions.

CLEAN WATER ACT AND MONTANA STATE WATER QUALITY STANDARDS

Upon review of the Porter Mount Management Project EA and the Project File, I find that activities associated with the Decision will comply with the Clean Water Act and Montana State Water Quality Standards. My decision includes project Design Criteria and BMPs (Appendix 2) to protect the water resource and achieve water quality standards. Inland Native Fish Strategy Riparian Habitat Conservation Areas (RHCA's) will be established along all wetlands and stream courses that are in or adjacent to treatment areas.

CLEAN AIR ACT

After reviewing Chapter 3 of the EA, I find that the activities in my decision will be coordinated to meet the requirements of the State Implementation Plans, Smoke Management Plan, and Federal Air Quality requirements.

NATIONAL HISTORIC PRESERVATION ACT, AMERICAN INDIAN RELIGIOUS FREEDOM ACT, AND NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT

Cultural Resource Reviews have been completed on all areas to be impacted by ground-disturbing activities. No Cultural Resources are expected to be affected by the Selected Alternative. Recognizing that the potential exists for unidentified sites to be encountered or disturbed during project activity, special provisions for their protection will be included in all contracts used to implement this project. These provisions will allow the Forest Service to unilaterally modify or cancel a contract to protect cultural resources, regardless of when they are identified. This provision will be used if a site were discovered after a harvest operation had begun. This project complies with the Region 1 programmatic agreement (1995) with the State Historic Preservation Office and the Advisory Council on Historic Preservation.

GOVERNMENT-TO-GOVERNMENT RELATIONS

The Forest Service consulted with the Confederated Salish and Kootenai tribes during the analysis process. The intent of this consultation has been to remain informed about the Tribal concerns regarding the American Indian Religious Freedom Act and other tribal issues. In addition, the Salish (Flathead), Kootenai and Upper Pend d'Oreilles reserved rights under the Hellgate Treaty of 1855 (July 16, 1855). These rights include the "right of taking fish at all usual and accustomed places, in common with the citizens of the Territory, and of erecting temporary buildings for curing; together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land." The Federal government has trust responsibilities to Tribes under a government-to-government relationship to insure that the Tribes reserved rights are protected. Consultation with the tribes through the project planning helps insure that these trust responsibilities are met.

THE ENDANGERED SPECIES ACT (16 USC 1531 ET. SEQ.)

Under the provisions of this Act, Federal agencies are directed to seek to conserve endangered and threatened species and to ensure that actions are not likely to jeopardize the continued existence of any of these species. Upon review of the BAs for wildlife, plants, and fish for the Porter Mount Project (Project File Exhibits F-10, F-11, H-1, H-2, L-1, and L-10), I find the Decision meets the requirements of the Endangered Species Act. The U.S. Fish and Wildlife Service concurred with determinations described on page 21 above.

ADMINISTRATION OF THE FOREST DEVELOPMENT TRANSPORTATION SYSTEM – ROADS POLICY – 36 CFR PART 212 ET AL. (PUBLISHED IN THE FEDERAL REGISTER ON JANUARY 12, 2001)

I find that the Selected Alternative complies with the terms of this new rule and policy.

MIGRATORY BIRD TREATY ACT

On January 10, 2001, President Clinton signed an Executive Order outlining responsibilities of Federal agencies to protect migratory birds. Upon review of the information in the EA, (pages 3-173 through 3-180), I find that the Decision complies with this Executive Order.

ENVIRONMENTAL JUSTICE

The action alternatives were assessed to determine whether they would disproportionately impact minority or low-income populations, in accordance with Executive Order 12898 (EA Chapter 3 Economics Section). No impacts to minority or low-income populations were identified during scoping or the comment period.

Compliance with other laws, regulations, and policies are listed in various sections of the EA, the Project File, and the Forest Plan.

APPEAL PROVISIONS AND IMPLEMENTATION

Copies of the Porter Mount Management Project EA are available for review at the Swan Lake Ranger Station in Bigfork, Montana, and at the Forest Supervisor's Office in Kalispell, Montana. The supporting Project File is available for review at the Swan Lake Ranger Station, 200 Ranger Station Road, Bigfork, MT 59911.

This decision is subject to appeal pursuant to 36 CFR 215.11. A written appeal must be submitted within 45 days following the publication date of the legal notice of this decision in *The Daily Inter Lake* Newspaper, Kalispell, Montana. It is the responsibility of the appellant to ensure their appeal is received in a timely manner. The publication date of the legal notice of the decision in the Newspaper of Record is the exclusive means for calculating the time to file an appeal. Appellants should not rely on date or timeframe information provided by any other source.

Paper appeals must be submitted to:

**USDA Forest Service, Northern Region
ATTN: Appeal Deciding Officer
P.O. Box 7669
Missoula, MT 59807**

or

Porter Mount Management Project
Decision Notice and FONSI

USDA Forest Service, Northern Region
ATTN: Appeal Deciding Officer
200 East Broadway
Missoula, MT 59802
Office hours: 7:30 a.m. to 4:00 p.m.

Electronic appeals must be submitted to:

appeals-northern-regional-office@fs.fed.us

In electronic appeals, the subject line should contain the name of the project being appealed. An automated response would confirm your electronic appeal has been received. Electronic appeals must be submitted in MS Word, Word Perfect, or Rich Text Format (RTF).

It is the appellant's responsibility to provide sufficient project- or activity-specific evidence and rationale, focusing on the decision, to show why my decision should be reversed. The appeal must be filed with the Appeal Deciding Officer in writing. At a minimum, the appeal must meet the content requirements of 36 CFR 215.14, and include the following information:

- The appellant's name and address, with a telephone number, if available;
- A signature, or other verification of authorship upon request (a scanned signature for electronic mail may be filed with the appeal);
- When multiple names are listed on an appeal, identification of the lead appellant and verification of the identity of the lead appellant upon request;
- The name of the project or activity for which the decision was made, the name and title of the Responsible Official, and the date of the decision;
- The regulation under which the appeal is being filed, when there is an option to appeal under either 36 CFR 215 or 36 CFR 251, subpart C;
- Any specific change(s) in the decision that the appellant seeks and rationale for those changes;
- Any portion(s) of the decision with which the appellant disagrees, and explanation for the disagreement;
- Why the appellant believes the Responsible Official's decision failed to consider the substantive comments; and
- How the appellant believes the decision specifically violates law, regulation, or policy.

For further information on this decision, please contact Steve Brady, District Ranger (406-837-7501) or Joleen Dunham, Project Leader (406-837-7510).

CATHY BARBOULETOS
Forest Supervisor

Date

Porter Mount Management Project
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Decision Notice and Finding of No Significant Impact



Appendix 1 Selected Alternative Summary

Appendix 1 – Selected Alternative Summary

Summary

Alternative B - Modified vegetation management treatments and associated activities are summarized in the Tables A1-1 through A1-5 below.

**TABLE A1-1.
SUMMARY OF PROPOSED TREATMENT ACTIVITIES FOR ALTERNATIVE B - MODIFIED**

Commercial Harvest Treatments	
Commercial Thin	512 acres
Seed Tree	350 acres
Salvage	66 acres
Sanitation	63 acres
Sanitation with Pre-Commercial Thin	13 acres
Clearcut with Reserve Trees	277 acres
Thin From Below – Non-Commercial	8 acres
Regeneration Harvest Openings greater than 40 acres	0 openings
Total Vegetation Treatment Acres	1289 acres
Fuels Management	
Ecosystem Burning	128 acres
Total Acres of All Treatments	1417 acres
Logging System	
Skyline	407 acres
Tractor	630 acres
Tractor/Skyline	199 acres
Tractor/Helicopter	26 acres
Skyline/Helicopter	19 acres
Helicopter	0 acres
Hand	8 acres
Total Acres of Logging Systems	1289 acres
Fuels Treatment	
Excavator Piling/Chipping	554 acres
Excavator Piling/Yard Tops/Lop and Scatter	30 acres
Lop and Scatter	8 acres
Underburn	581 acres
Yard Tops/Lop and Scatter	244 acres
Total Acres of Fuel Treatment	1417 acres
Acres of Treatment within WUI	1089 acres
Road Management	
Temporary Road Construction	Approximately 4.74 miles
Designated Skid Road Construction	Approximately 0.15 miles
Best Management Practices	Approximately 54.13 miles

Porter Mount Management Project
Appendix 1 - Selected Alternative Summary

**TABLE A1-2.
TEMPORARY ROADS NEEDED FOR ALTERNATIVE B - MODIFIED
(mileage displayed is an estimate)**

Unit	Access Needs	Miles
2	Access via new NFS temporary road beginning from FDR 5373	1.47
6	Access via new NFS temporary road beginning from FDR 1645	0.15
7	Access via new NFS temporary road beginning from FDR 2983	0.20
8	Access via new NFS temporary road beginning from FDR 1645	0.30
10	Access via new NFS temporary road beginning from FDR 10703	0.35
19	Access via new NFS temporary road beginning from FDR 9510	0.19
31	Access via new NFS temporary road beginning from FDR 9510	1.26
33	Access via new NFS temporary road beginning from FDR 9510	0.31
36	Access via new NFS temporary road beginning from FDR 2987	0.22
40	Access via new NFS temporary road beginning from FDR 5370	0.29
TOTAL		4.74

**TABLE A1-3.
SKID ROUTES NEEDED FOR ALTERNATIVE B - MODIFIED**

Unit	Estimated Access Needs	Miles
16	Access via skid road beginning from FDR 9669	0.07
44	Access via skid road beginning from FDR 2987	0.04
51	Access via skid road beginning from FDR 5370	0.04
TOTAL		0.15

Treatment Units associated with **Alternative B - Modified** are listed below in Table A1-4.

**TABLE A1-4.
PROPOSED TREATMENT ACTIVITIES FOR ALTERNATIVE B - MODIFIED**

Unit No.	Unit Acres	Alternative C Treatment	Logging System	Hazardous Fuels Reduction	Forest Plan MA Direction
1	128	Ecosystem Burn	N/A	Underburn by hand or aerial ignition	MA 9
2	28	Commercial Thin	Skyline	Excavator Piling/Chipping	MA 9
2	87	Commercial Thin	Tractor	Excavator Piling/Chipping	MA 9
2	39	Commercial Thin	Tractor/Skyline	Yard Tops/Lop and Scatter	MA 9
3	40	Seed Tree	Skyline	Underburn	MA 15
4	10	Salvage	Tractor	Yard Tops/Lop and Scatter	MA 15
4	7	Salvage	Skyline	Yard Tops/Lop and Scatter	MA 15
5	16	Seed Tree	Tractor	Underburn	MA 15
6	10	Clearcut with Reserve Trees	Skyline	Underburn	MA 15
7	19	Commercial Thin	Skyline/Helicopter	Underburn	MA 15
8	14	Clearcut with Reserve Trees	Skyline	Underburn	MA 15
9	18	Clearcut with Reserve Trees	Tractor/Skyline	Excavator Piling/Chipping	MA 15

Porter Mount Management Project
Appendix 1 - Selected Alternative Summary

**TABLE A1-4.
PROPOSED TREATMENT ACTIVITIES FOR ALTERNATIVE B - MODIFIED**

Unit No.	Unit Acres	Alternative C Treatment	Logging System	Hazardous Fuels Reduction	Forest Plan MA Direction
10	17	Clearcut with Reserve Trees	Skyline	Underburn	MA 15
11	8	Seed Tree	Tractor	Excavator Piling/Chipping	MA 15
12	25	Seed Tree	Skyline	Underburn	MA 15
12	4	Seed Tree	Tractor	Excavator Piling/Chipping	MA 15
13	25	Commercial Thin	Skyline	Yard Tops/Lop and Scatter	MA 15
14	13	Seed Tree	Skyline	Underburn	MA 15
15	51	Commercial Thin	Tractor	Excavator Piling/Chipping	MA-9
15	30	Commercial Thin	Tractor/Skyline	Excavator Piling/Yard Tops/Lop and Scatter	MA-9
16	7	Seed Tree	Tractor	Excavator Piling/Chipping	MA 15
17	40	Seed Tree	Tractor	Excavator Piling/Chipping	MA 15
19	2	Thin From Below - Non-Commercial	Hand	Lop & Scatter	MA 15
20	34	Clearcut with Reserve Trees	Tractor	Excavator Piling/Chipping	MA 15
21	22	Clearcut with Reserve Trees	Skyline	Yard Tops/Lop and Scatter	MA 15
22	6	Thin From Below - Non-Commercial	Hand	Lop & Scatter	MA 15
23	8	Seed Tree	Skyline	Underburn	MA 15
24	4	Seed Tree	Skyline	Underburn	MA 15
25	13	Salvage	Tractor	Excavator Piling/Chipping	MA 15
26	34	Seed Tree	Tractor	Excavator Piling/Chipping	MA 15
26	6	Seed Tree	Tractor	Underburn	MA 15
27	12	Seed Tree	Tractor	Excavator Piling/Chipping	MA 15
28	11	Clearcut with Reserve Trees	Tractor	Excavator Piling/Chipping	MA 15
29	26	Salvage	Tractor	Excavator Piling/Chipping	MA 15
30	2	Commercial Thin	Skyline	Yard Tops/Lop and Scatter	MA 15
31	40	Clearcut with Reserve Trees	Skyline	Underburn	MA 15
32	24	Commercial Thin	Skyline	Yard Tops/Lop and Scatter	MA 9
32	6	Commercial Thin	Tractor/Skyline	Underburn	MA 15
33	31	Clearcut with Reserve Trees	Skyline	Underburn	MA 15
34	40	Seed Tree	Tractor/Skyline	Underburn	MA 15
35	10	Salvage	Tractor	Excavator Piling/Chipping	MA 15
36	9	Commercial Thin	Tractor/Skyline	Excavator Piling/Chipping	MA 9
36	26	Commercial Thin	Tractor	Excavator Piling/Chipping	MA 9
37	9	Seed Tree	Tractor	Excavator Piling/Chipping	MA 15
38	18	Commercial Thin	Tractor/Skyline	Excavator Piling/Chipping	MA 15
39	26	Commercial Thin	Tractor/Helicopter	Excavator Piling/Chipping	MA 15
40	20	Seed Tree	Tractor	Underburn	MA 15
41	24	Commercial Thin	Tractor/Skyline	Excavator Piling/Chipping	MA 15
42	31	Clearcut with Reserve Trees	Skyline	Underburn	MA 15
43	13	Sanitation with Pre-Commercial Thin	Tractor	Excavator Piling/Chipping	MA 15
44	19	Clearcut with Reserve Trees	Tractor	Underburn	MA 15
44	14	Clearcut with Reserve Trees	Tractor/Skyline	Underburn	MA 15

Porter Mount Management Project
Appendix 1 - Selected Alternative Summary

**TABLE A1-4.
PROPOSED TREATMENT ACTIVITIES FOR ALTERNATIVE B - MODIFIED**

Unit No.	Unit Acres	Alternative C Treatment	Logging System	Hazardous Fuels Reduction	Forest Plan MA Direction
45	27	Commercial Thin	Skyline	Excavator Piling/Chipping	MA 15
47	16	Clearcut with Reserve Trees	Tractor	Excavator Piling/Chipping	MA 15
48	55	Commercial Thin	Tractor	Excavator Piling/Chipping	MA 15
51	40	Seed Tree	Tractor	Underburn	MA 15
52	63	Sanitation	Tractor	Excavator Piling/Chipping	MA 9
53	15	Commercial Thin	Skyline	Underburn	MA 15
54	24	Seed Tree	Skyline	Underburn	MA 15

Resource Enhancement Projects

To improve other resource values within the Porter Mount Project Area, Resource Enhancement Projects were identified during project design are shown in the table below. Please refer to Map 3 at the end of this chapter for a display of the project locations.

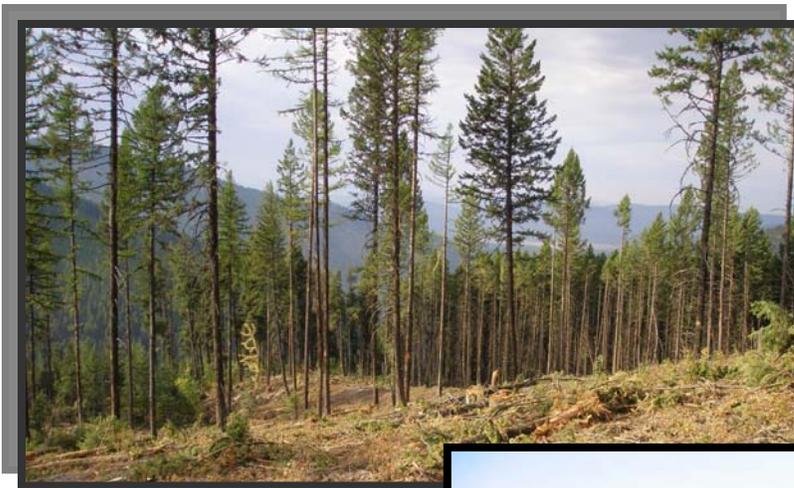
Several sources of funding exist for resource enhancement projects. Many items have the potential to be funded with Knutson-Vandenberg (KV) funds, while other items would be funded with congressionally approved funds or Stewardship dollars. Implementation would be based on annual budgets and program direction. These projects are not necessary to mitigate impacts of the proposed action, but are specific resource enhancements within the project area that would be beneficial to a variety of resources. If funding were not available, the improvements from these projects would not be accomplished. Table AS1-5 presents the identified opportunities to improve fish habitat, riparian conditions, and wildlife habitat.

**TABLE A1-5.
RESOURCE ENHANCEMENT PROJECTS**

Ground Location	Enhancement Project
FDR #5380, FDR #5382, FDR #5371, and FDR #5376. All within "Homestead Creek," tributary to Upper Mount Creek.	Complete BMP improvements on these roads (or portions of roads) that are not on a haul route. Keep road on system, but if existing culvert is causing resource damage, remove or replace the culvert. These actions would help reduce impacts to sensitive cutthroat trout population downstream.
FDR #10501, Section 2, below private land.	Replace culvert at risk of failure due to increased flows flowing primarily from private lands upslope.
Shrub Planting in Units 20, 21, 23, 24, 31, 43, and 47	140 acres of shrub planting to improve wildlife habitat

Porter Mount Management Project

Decision Notice and Finding of No
Significant Impact



Appendix 2
Design Criteria and Best Management
Practices

Appendix 2 – Management Requirements and Design Criteria

Management Requirements and Design Criteria

The measures identified in the following table serve to further reduce impacts to the specific resources identified. Most are considered Design Criteria and are included in all action alternatives.

Several abbreviations are used in the responsibility section of Table A2 – 1. The following explains those abbreviations:

DR	District Ranger	BT	Botanist
SA	Sale Administrator	TMC	Timber Marking Crew
SP	Sale Prep	NWM	Noxious Weed Manager
WB	Wildlife Biologist	LEO	Law Enforcement Officer
FMO	Fire Management Officer	IDT	Interdisciplinary Team Members
ENG	Engineer	ARCH	Archaeologist
SILV	Silviculturist	HYD	Hydrologist
DRC	District Road Coordinator	TP	Timber Sale Purchaser
RF	Resource Forester	RA	Range Administrator
FAFMO	Fuels Assistant Fire Management Officer	SS	Soils Scientist
FISH	Fisheries Biologist		

**TABLE A2 – 1.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

OBJECTIVE	TASK	RESPONSIBILITY	DUE DATE
Public Safety	Contracts will require the contractor to clearly post signs warning the public of nearby activities and truck hauling traffic associated with the treatments.	SA, DRM	Pre & post - sale, during harvest activities

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

**TABLE A2 – 1.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

OBJECTIVE	TASK	RESPONSIBILITY	DUE DATE
Public Safety	The District Assistant Fire Management Officer (Fuels) or designated liaison will notify nearby landowners prior to fuel reduction activities commencing on NFS lands that are adjacent to their properties.	FAFMO	Pre - sale, during harvest activities
Special Use Permits	All permitted improvements, including power and phone service lines and water transmission lines (authorized by special use permits) will be clearly marked and protected during project implementation.	SA, TMC, IF, FMO, SP, RF	Pre & post - sale
Maintain soil quality within the Ecosystem Burn	Ecosystem Burn Unit #1 will be ignited when burning conditions would maintain soil erosion and nutrient levels within the range of historic burns.	SS, FAFMO	Prior to implementation
Soil Productivity	All mechanized units would be logged using designated skid trails. Equipment may occasionally leave the trails to access trees or accomplish other activities.	SA, SP, SS	Pre & post sale During harvest activities
Soil Productivity	Logging may occur in any season (subject to applicable timing restrictions required for other resources). In all seasons except winter, skid trails must be spaced on average of 120 feet apart in Units 16, 20, 31, 40, 47, and 48 . The goal is to reduce adverse soil impact and to limit such impact to less than 15 percent of the harvest area, which includes detrimental soil disturbance from skid trails, temporary roads, and landings associated with either past activities or proposed activities. Units 25 and 36 should be logged under winter conditions only to avoid impacts of additional skid trails.	SA, SP, SS	Pre & post - sale, during harvest activities
Soil Productivity	Monitor soil moisture conditions prior to allowing equipment to begin operations in summer and monitor snow and temperature conditions prior to winter logging. and document such monitoring in the sale administrators inspection report..	SA	Pre - sale & during harvest activities
Soil Productivity	Reuse all existing roads and skid trails to the extent feasible unless doing so would adversely affect soil, water or other resources. Reusing existing roads and trails would reduce the amount of additional soil disturbance (cumulative effects). If roads or trails cannot be reused, their extent must be considered when laying out additional skid trails.	SA, SP, SS	Pre & post - sale, during harvest activities

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

**TABLE A2 – 1.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

OBJECTIVE	TASK	RESPONSIBILITY	DUE DATE
Soil Productivity	Winter logging must occur when there is enough settled snow and/or frozen ground to protect the soil from detrimental disturbance. If equipment does not mix soil into the snow or cause muddy water to bleed into the snow then conditions are right for winter logging.	SA, TP, SS,	During harvest activities
Soil Productivity	All mechanical fuel reduction would be accomplished with excavators and/or low ground pressure chipping machinery. Excavators will, to the extent feasible, remain on skid trails. If chipping is implemented, excavators with mounted chipping heads would be used exclusively.	SA, TP, SS	During harvest activities
Soil Productivity	Fuel reduction/slash disposal will be delayed for one wet season after the material has been piled in Units 9, 11, part of 12, 16, 17, 20, part of 26, 27, 28, 37, and 47.	SA, FMO, SS	Post - harvest
Soil Productivity	<p>If monitoring results indicate that detrimental soil disturbances for a given treatment unit exceed or equal 15 percent, then all or a portion of the following actions will be used to begin the restoration of soil quality. Restoration would occur on sites with a high amount of detrimentally disturbed ground such as designated skid trails and landings:</p> <ul style="list-style-type: none"> ▪ Scarify heavily used skid trails and landings with the teeth on an excavator bucket to a depth of 2 to 4 inches. ▪ Plant Montana - Certified Weed Free native grasses on the scarified soils as recommended by the Forest Botanist. This process will add organic matter to the soil and mulch to the surface. ▪ Plant native shrubs where needed to augment natural vegetation and scarification. <p>The site conditions will be used to determine which of the above mitigations will be used. These mitigations do not result in instant restoration of detrimentally disturbed soils; rather they begin the restoration process.</p> <ul style="list-style-type: none"> ▪ All temporary roads constructed for this project that utilize existing road templates will be reclaimed by removing any installed culverts or temporary bridges, by placing large woody material on the template (where that material is available), and by seeding exposed soils with the native plant mix as specified by the Forest Botanist. In addition, all newly constructed temporary roads will be reclaimed after use, as soon as logistically practicable. The reclaiming of new temporary roads will include re - contouring the entire road template to natural ground contour, and to the extent feasible, placing the top soil back on the soil surface. 	SA, SS	During harvest activities, post - sale

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

**TABLE A2 – 1.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

OBJECTIVE	TASK	RESPONSIBILITY	DUE DATE
Ensure implementation changes meet Design intent	Consult project Silviculturist where treatment deviations are required during contract execution, as a result of changed conditions that materially affect the intended treatment as described in the site-specific silvicultural prescription. As needed, the silvicultural prescription will be modified and re-approved by a certified Silviculturist.	SP, SILV	Prior to contract preparation
Leave Tree Projection	All reasonable care should be taken by the Contractor to avoid damage to the root, bole, and crown of trees reserved from cutting. No more than 5 percent of the trees designated to be left and protected should be damaged beyond recovery by the Contractor's operations. Any tree damaged beyond recovery, i.e., will die within 1 year as a result of damage, will be removed or otherwise treated by the Contractor as instructed by the Forest Service.	SA/HI, TP	During activity
Retain Hardwoods	Retain and protect all hardwood species to minimize damage and protect this scarce resource.	TMC, SA/HI, TP	Sale preparation, contract preparation, during activity
Control Spread of Noxious Weeds	Seed landings, temporary roads, and roadsides with soil disturbance with a Montana-Certified grass ground cover (seed mix of native plants and non-native annual will be specified by the Forest Botanist), as soon as practicable after disturbance to provide for site projection until native species are established. During construction of temporary roads, to the extent feasible, the topsoil (A Horizon) will be left to the side and replaced on the temporary road when use of the temporary road is no longer needed for the project. Seeding of temporary roads will occur after topsoil is replaced.	SA, TP, DRC	Pre- & Post-Sale & during harvest activities
Control Spread of Noxious Weeds	Power scrub or steam clean all off-road logging and construction equipment associated with sale activities and temporary road construction on the undercarriage and chassis before transport to the project area. This cleaning shall remove all soil, plant parts, seeds, vegetative matter, or other debris that could contain or hold seeds. All subsequent move-ins of equipment to the project area shall be treated in the same manner as the initial move in. "Off-road equipment" includes all logging and construction machinery, except for log trucks, chip vans, service vehicles, water trucks, pickup trucks, cars, and similar vehicles.	SA, TP	Pre-harvest

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

**TABLE A2 – 1.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

OBJECTIVE	TASK	RESPONSIBILITY	DUE DATE
Reduce the Potential for Spread of Noxious Weeds	Where trees are present along Forest Development Road #5373 (adjacent to Units 2 and 3), a 50-foot leave tree buffer would be established along the road. This buffer would help continue to insulate the rocky outcrops and grasslands from potential new weed establishment after implementation. Ground-based equipment would avoid these areas when practical during implementation. In addition, lop and scattering with underburning or chipping would be used to reduce fuels within these stands. Concentrated pile burning would not occur within these stands or over the rock outcrops and grassland openings. These measures would not eliminate all weed seeds from establishing within these unique habitats, but would only reduce the potential for establishment and spread.	TMC, SA, TP	Pre-harvest
Preserve TES Plant Populations and Their Habitats	Avoid all wetlands with all ground-disturbing activities, including lakes, ponds, marshes, fens, and streams. Establish buffers around wetlands – 150 feet for areas greater than 1 acre and 50 feet for areas less than 1 acre. Buffers should begin where facultative wetland plants end.	SP, SA, BT	Prior to implementation, during harvest activities
Compliance with Montana Streamside Management Zone Law (SMZ)	Ensure that all activities are in full compliance with Montana SMZ regulations	SA, ENG	Throughout the duration of all activities
Implementation of Best Management Practices (BMPs)	Ensure that all activities are implemented in full compliance with Montana Best Management Practices. Reshape existing drainage features if needed.	SA, SP, ENG, FAFMA	Throughout the duration of all activities

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

**TABLE A2 – 1.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

OBJECTIVE	TASK	RESPONSIBILITY	DUE DATE																														
<p style="text-align: center;">Ensure correct INFISH Riparian Buffers are applied on the ground</p>	<p>Avoid all activity within 150 feet of perennial streams and 50 feet of intermittent streams. (There are no fish-bearing streams on NFS lands.) If any wetlands are found, avoid all activity within 50 feet of wetlands less than 1 acre and 150 feet of wetlands greater than 1 acre.</p> <p>Designate the following RHCA buffers for Treatment Units:</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><u>Unit</u></th> <th style="text-align: left;"><u>Buffer</u></th> </tr> </thead> <tbody> <tr> <td>Unit 2</td> <td>50' from stream in north portion of unit, near switchback of FDR 5373</td> </tr> <tr> <td>Unit 4</td> <td>50' from same stream described for Unit 2 at extreme northern tip</td> </tr> <tr> <td>Unit 12</td> <td>50' from stream on western boundary</td> </tr> <tr> <td>Unit 13</td> <td>Stream on northern edge becomes perennial at FDR 2983 culvert; buffer 50' above this culvert and 150' below culvert</td> </tr> <tr> <td>Unit 15</td> <td>150' from stream in middle of unit</td> </tr> <tr> <td>Unit 32</td> <td>50' from stream in center of unit</td> </tr> <tr> <td>Unit 34</td> <td>150' from stream in southwest corner of unit</td> </tr> <tr> <td>Unit 42</td> <td>150' from stream in southern portion of unit</td> </tr> <tr> <td>Unit 45</td> <td>150' from stream in southern portion of unit</td> </tr> <tr> <td>Unit 47</td> <td>150' from stream in northern portion of unit</td> </tr> <tr> <td>Unit 48</td> <td>150' from stream in northern portion of unit</td> </tr> <tr> <td>Unit 52</td> <td>150' from stream in southern portion of unit</td> </tr> <tr> <td>Unit 53</td> <td>150' from stream in western portion of unit</td> </tr> <tr> <td>Unit 54</td> <td>50' from stream in northeastern portion of unit</td> </tr> </tbody> </table> <p>All other units require no RHCA Buffer.</p>	<u>Unit</u>	<u>Buffer</u>	Unit 2	50' from stream in north portion of unit, near switchback of FDR 5373	Unit 4	50' from same stream described for Unit 2 at extreme northern tip	Unit 12	50' from stream on western boundary	Unit 13	Stream on northern edge becomes perennial at FDR 2983 culvert; buffer 50' above this culvert and 150' below culvert	Unit 15	150' from stream in middle of unit	Unit 32	50' from stream in center of unit	Unit 34	150' from stream in southwest corner of unit	Unit 42	150' from stream in southern portion of unit	Unit 45	150' from stream in southern portion of unit	Unit 47	150' from stream in northern portion of unit	Unit 48	150' from stream in northern portion of unit	Unit 52	150' from stream in southern portion of unit	Unit 53	150' from stream in western portion of unit	Unit 54	50' from stream in northeastern portion of unit	<p>FISH, TMC, SP, SA</p>	<p>During unit layout and during harvest activities</p>
<u>Unit</u>	<u>Buffer</u>																																
Unit 2	50' from stream in north portion of unit, near switchback of FDR 5373																																
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Unit 54	50' from stream in northeastern portion of unit																																
<p style="text-align: center;">Protect water quality at stream crossing for temporary road accessing Unit 2</p>	<p>Carefully locate and design stream crossing before temporary road is built. Install only during dry channel conditions. Ensure timely removal and rehabilitation of site when the harvest activities are complete.</p>	<p>ENG, DRC, FISH or HYD</p>	<p>During assembly of sale contract package</p>																														

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

**TABLE A2 – 1.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

OBJECTIVE	TASK	RESPONSIBILITY	DUE DATE
Protect water quality by ensuring insufficient road culverts are replaced with correct structures	Inventory all existing road/stream crossings. Replace any culvert that constricts bank full width more than 50 percent or has substantial outlet drop or is showing signs of excessive rust or failure. Install new culverts at Q100 flows and bank full widths. Prioritize funding for perennial streams first, then intermittent, then ephemeral draws. Additionally, install new ditch relief pipes if any existing pipes show evidence of collecting too much water.	ENG, DRC, FISH or HYD	During assembly of sale contract package
Coarse Woody Debris Retention	In the Clearcut with Reserve Trees, Seed Tree, Commercial Thin, Sanitation, and Salvage Units, the minimum retention for down woody material would be, where available, 15 pieces average per acre, 9 to 20 inches diameter and 10 pieces average per acre greater than 20 inches diameter. This amount of down woody material equates to 50 to 10 tons per acre. Generally, down woody material to be left would be further than 150 feet from private land boundaries.	SILV, SA, TP, SP	Pre & Post - Sale, during harvest activities
Snag Retention	At a minimum, in the Clearcut with Reserve Trees, Seed Tree, Commercial Thin, Sanitation, and Salvage Units, 6 snags average per acre that are 12 to 20 inches DBH would be left. If existing snag densities are below these densities, substitute live trees would be left where possible. All snags greater than 20 inches DBH would be left, where available. All standing dead cull western larch, ponderosa pine, and Douglas-fir trees 15 inches DBH or greater may be retained and all hardwood trees would be designated to be left. Generally, the snags to be left would be further than 150 feet from open roads and private land boundaries, and well distributed. Snags that pose a safety hazard to the Contractors operation would be removed.	SILV, SA, SP, TP	Pre & post - sale, during harvest activities
Protect Northern Goshawk	In order to protect a northern goshawk pair and young from disturbance during the breeding season, no ground disturbing activities will be conducted April 15 through August 15 in Units 40, 41, 42, 43, 44, 45, 46, 49, and 50 . These units are adjacent to a goshawk nesting area.	SA, TP	During Harvest Activities
Decrease Disturbance to Bald Eagle Nest Site	In order to decrease the chance of disturbance at an existing bald eagle nest site, ground disturbing activities would not occur in Unit 15 from February 1 through July 15.	SA, TP	During Harvest Activities

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

**TABLE A2 – 1.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

OBJECTIVE	TASK	RESPONSIBILITY	DUE DATE
Protect Threatened, Endangered, or Sensitive Species	The contract will include provisions to cease activity or otherwise protect populations and individuals of threatened, endangered, or sensitive species. This allows for modification of the project should an unforeseen issue(s) be identified during operations. Standard contractual requirements used in all contracts provide for modification or termination of the contract to avoid impacts and protect TES habitat.	SP, SA, WB	During assembly of sale contract package
Snag Retention	Public access will be restricted on roads normally closed to use and on temporary roads.	SA, TP	During Harvest Activities
Snag Retention	All temporary roads constructed on NFS lands would be reclaimed after use. Snags that are cut down during temporary road construction would be left on the ground.	SA, TP	During Road Construction and Post-Harvest
Meet Forest Plan Winter Range Standards	Vegetative treatments located in areas designated as MA-9 (white-tailed deer winter range) would be designed to meet Forest Plan standards for MA-9. The MA- 9 standards include “achieving at least 50% of the area in winter thermal cover.” Thermal cover in the Porter Mount Area consists of stands with evergreen coniferous trees with an average minimum height of 60 feet and a minimum crown canopy greater than 50%.	SP, TMC, WB	Pre-Harvest
Maintain Habitat Security	Vegetation would be retained around berms and gates, where needed, to maintain closure effectiveness.	SA, TP	Post Harvest
Maintain Habitat Security	If berms are removed for access to treatment units, temporary gates would be installed. Berms would be reinstalled when fuel reduction activities are complete.	SA, TP	During Harvest and Post Harvest
Protect Heritage Resources	Modify contractual requirements to provide for protection of Heritage Resources and modify the contract to avoid impacts to Heritage Resource if cultural resources are discovered during ground disturbing activities.	SA, ARCH, SP	Pre and Post Sale, during harvest activities
Preserve Scenery Resources	For Units 2, 15, 32, 36, and 52 layout of the unit boundaries would be undulated and feathered so straight lines are minimized. Units would be designed to blend with the characteristic landscape.	SP, SA, SILV,	Pre-Sale

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

**TABLE A2 – 1.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

OBJECTIVE	TASK	RESPONSIBILITY	DUE DATE
Preserve Scenery Resources	In Unit 2 , where feasible and in conjunction with soil Design Criteria, mulch or cover exposed mineral soil with slash following operations.	SA	Post-harvest
Preserve Scenery Resources	In Unit 12 , feather north boundary line by removing 50 percent canopy at the boundary line on a gradient to 90+ percent canopy removal in the interior of the unit.	SA, SP	Pre-Sale
Preserve Scenery Resources	In Unit 21 , feather north and south boundary lines by removing 50 percent canopy at the north and south boundary lines on a gradient to 90+ percent canopy removal in the interior of the unit.	SA, SP	Pre-Sale
Preserve Scenery Resources	In Units 15, 32, and 36 reduce distance between skyline corridors (such as frequency, 60 foot distance between corridors as opposed to 150 foot) to increase control of skyline cable to better ensure protection of residual stand. Corridor width should be considered during implementation to reduce corridor stripes in visually sensitive areas.	SA, SP	Pre-harvest and during harvest activities

Best Management Practices

Introduction

Federal agency compliance with pollution control is addressed through Section 313 of the Clean Water Act, Executive Order 12580 (January 23, 1987), National Nonpoint Source Policy (December 12, 1984), USDA Nonpoint Source Water Quality Policy (December 5, 1986) and the Environmental Protection Agency in their guidance "Nonpoint Source Controls and Water Quality Standards" (August 19, 1987). In order to comply with State and local non-point pollution controls the Forest Service will apply Best Management Practices (BMPs) to all possible non-point sources resulting from management activities proposed in this Environmental Assessment. These BMPs are the Soil and Water Conservation Practices described in the FSH 2509.22.

BMPs are the primary mechanism for achievement of water quality standards (EPA, 1987). This appendix describes the Forest Service's BMP process in detail, and lists the key Soil and Water Conservation Practices that have been selected to be used in the action alternatives analyzed in this EA.

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

BMPs include, but are not limited to, structural, and non-structural controls, operations, and maintenance procedures. BMPs can be applied before, during, or after pollution-producing activities to reduce or eliminate the introduction of pollutants into the receiving watershed (40 CFR 130.2, EPA Water Quality Standards Regulation). BMPs are usually applied as a system of practices rather than a single practice. They are selected on the basis of site-specific conditions that reflect natural background conditions and political, social, economic, and technical feasibility.

The Flathead National Forest emphasizes the application of BMPs “to protect or improve the quality of the water resource” (Forest Plan, page II-40). Practices compiled from the Flathead Drainage 208 Project (May 1980), Flathead National Forest Hydrologic Guidelines (1980), and other sources are listed in the Water and Soils Sections of Chapter II, Forest-Wide Standards portion of the Flathead Forest Plan (pp. II-40 thru II-46). Additional BMPs are listed with the descriptions of individual management areas and in Appendix Q, Landtype Guidelines (pp. Q-1 through Q-9). The Water Standards section further states that “Water quality) limits listed in the State Water Quality Standards are coordinated with BMPs” (p. II-40).

Road Maintenance Associated with the Porter Mount Project

As summarized on the following table, road maintenance (application BMPs) would occur on **54.13 miles** of specified road used for haul of commercial products.

**TABLE A2-2
ROAD MAINTENANCE ASSOCIATED WITH THE
PORTER MOUNT MANAGEMENT PROJECT**

Road Number	Miles
FDR #213	0.12
FDR #1644	2.07
FDR #1644A	0.29
FDR #1645	3.03
FDR #1645B	0.47
FDR #1646	0.34
FDR #2945	0.8
FDR #2983	1.85
FDR #2984	8.18
FDR #2985	1.9
FDR #2986	1.5
FDR #2986A	0.23
FDR #2987	7.48
FDR #5369	1.69
FDR #5370	2.31
FDR #5371	0.28

**TABLE A2-2
ROAD MAINTENANCE ASSOCIATED WITH THE
PORTER MOUNT MANAGEMENT PROJECT**

Road Number	Miles
FDR #5373	4.0
FDR #5386	1.33
FDR #9510	0.36
FDR #9659	0.32
FDR #9660	0.35
FDR #9661	0.5
FDR #9662	6.16
FDR #9669	1.61
FDR #9669A	0.04
FDR #9673	1.1
FDR #9673A	0.16
FDR #9674	0.77
FDR #10501	0.5
FDR #10703	2.18
FDR #10704	2.21
Total BMPs	54.13

State Requirements for Protection of Water Quality

Montana State Water Quality Standards require the use of reasonable land, soil, and water conservation practices (similar to BMPs) as the controlling mechanism for non-point pollution. The use of BMPs is also required in the Memorandum of Understanding between the Forest Service and the State of Montana as part of the agency's responsibility as the designated water quality management agency on NFS lands.

BMP Implementation Process

In cooperation with the State, the Forest Service's primary strategy for the control of non-point sources of pollution is based on the implementation of preventive practices (i.e., BMPs). The BMPs have been designed and selected to protect the identified beneficial uses of the watershed.

The Forest Service non-point source management system consists of the following steps:

1. BMP Selection and Design - Water quality goals are identified in the Forest Plan. These goals meet or exceed applicable legal requirements including State water quality regulations, the Clean Water Act, and the NEPA. Environmental assessments for projects are tiered to Forest Plans using the NEPA process. The appropriate BMPs are selected for each project by an ID Team. In each new location, there is flexibility to design different BMPs depending on local conditions and values and downstream beneficial uses of water. The BMP selection and design are dictated by the proposed activity, water quality objectives, soils, topography, geology, vegetation, and climate. Environmental impacts and water quality protection options are evaluated, and alternative mixes of practices are considered. A final collection of practices is selected that not only protect water quality but meet other resource needs. These final selected practices constitute the BMPs for the project.
2. BMP Application - The BMPs are translated into contract provisions, special use permit requirements, project plan specifications, and so forth. This ensures that the operator or person responsible for applying the BMPs actually is required to do so. Site-specific BMP prescriptions are taken from plan-to-ground by a combination of project layout and Resource Specialists (hydrology, fisheries, soils, etc.). This is when final adjustments to fit BMP prescriptions to the site are made.
3. BMP Monitoring - When the resource activity begins (e.g., timber harvest or road building), Timber Sale Administrators, Engineering Representatives, Resource Specialists, and others ensure the BMPs are implemented according to plan. BMP implementation monitoring is done before, during, and after resource activity implementation. This monitoring answers the question: Did we do what we said we were going to do? Once BMPs have been implemented, further monitoring is done to evaluate if the BMPs are effective in meeting management objectives and protecting beneficial uses. If monitoring indicates that water quality standards are not being met or beneficial uses are not being protected, corrective action will consider the following:
 - a. Is the BMP technically sound? Is it really best or is there a better practice that is technically sound and feasible to implement?

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

- b. Was the BMP applied entirely as designated? Was it only partially implemented? Were personnel, equipment, funds, or training lacking which resulted in inadequate or incomplete implementation?
 - c. Do the parameters and criteria that constitute water quality standards adequately reflect human-induced changes to water quality and beneficial uses?
4. Feedback - Feedback on the results of BMP evaluation is both short and long term in nature. Where corrective action is needed, immediate response will be undertaken. This action may include: modification of the BMP, modification of the activity, ceasing the activity, or possibly modification of the State Water Quality Standard. Cumulative effects over the long-term may also lead to the need for possible corrective actions. Effectiveness of BMPs is based on audit results. Audit results specific to the Swan Lake Ranger District of the Flathead National Forest are on file at the District Office.

Best Management Practice Effectiveness

In looking at the effectiveness of BMPs for the Flathead National Forest, it is reasonable to group BMP audit results for the Kootenai and Flathead Forests together since they have similar soils. Both Forests are dominated by soils formed in the glacial till formed in material weathered from Belt rocks. This material is topped with wind blown volcanic ash from west coast eruptions up to 6000 years ago.

BMP audits have occurred on the Flathead National Forest and Kootenai National Forest since 1988. Audits are done to determine if BMPs were properly applied and, if so, if they were effective at maintaining soil and water quality. Since 1988, individual BMPs have been audited or monitored 2,232 times on the Flathead and Kootenai National Forests. They were effective 2,211 times.

In order to analyze the results of the BMP audits, they were grouped according to the soil type on which they occurred. The simplest way is to group them by two classes:

1. Residual soils that formed from the underlying bedrock, or
2. Soils formed from glacial till.

Looking at these soil criteria, BMPs were effective when properly applied on glacial soils 1,585 times out of 1,596 applications. BMPs were effective when properly applied on residual soils 154 out of 156 applications. An additional 480 BMPs were monitored without reference to the soil types on which they are applied. Of these, 472 were effective at protecting soil and water quality.

In summary, BMPs were effective 99.3 percent of the time they were properly applied on glacial till soils. Lumping all the audit results together regardless of their soil types and including the earliest audits that were not specific to soil type, BMPs were effective 99 percent of the time they were properly applied on the Flathead and Kootenai National Forests.

Items Common to All Soil and Water Conservation Practices

Responsibility for Implementation

The Swan Lake District Ranger is responsible for ensuring that all applicable SWCPs are applied and implemented. The Timber Management Assistant is responsible for ensuring that the objectives of the SWCPs identified in this appendix are incorporated into the Timber Sale Contract by use of the appropriate Timber Sale Contract CT provisions. The Timber Sale Administrator and Engineering Representative/Contracting Officer's Representative (ER/COR) is responsible for ensuring that contract provisions are properly administered on the ground.

Monitoring

The Timber Sale Administrator, ER/COR, Forest Soil Scientist, and Forest Hydrologist as needed, will monitor the effectiveness of the applied SWCPs. If the practice is not effective in meeting State or Forest Plan standards, the practice or project activity will be redesigned, rescheduled, or dropped. Feedback of the results of the site-specific SWCP monitoring to the Forest Soil Scientist will ensure that the best practices are incorporated into all projects impacting water quality. This requirement conforms to the objectives of Practice 11.02 - Soil and Water Resource Monitoring and Evaluation.

SITE-SPECIFIC BEST MANAGEMENT PRACTICES

Description of the soil and water conservation practices from the Forest Service Soil and Water Conservation Handbook (FSH 2509.22) will be applied in all alternatives. The location where the practices will be applied is specified in the table below. For a more detailed description of a specific BMP, refer to the Soil and Water Conservation Handbook.

Abbreviations used in this table:

SPS =	Special Project Specification	FNF =	Flathead National Forest
TSC =	Timber Sale Contract	PSF =	Pre Sale Forester
TSA =	Timber Sale Administrator	ER =	Engineering Representative
SMZ =	Streamside Management Zone	COR =	Contracting Officer's Representative
IDT =	Interdisciplinary Team	SAM =	Sale Area Map
SWCP =	Soil and Water Conservation Practice	FMO =	Fire Management Officer
RHCA =	Riparian Habitat Conservation Area	EA =	Environmental Assessment
INFS =	Inland Native Fish Strategy		

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

**TABLE A2 – 3.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

SWCP	MT BMP	SWCP OBJECTIVE	APPLICABLE UNITS/ROADS	RECOMMENDED BEST MANAGEMENT PRACTICES BY IDT/TSA	CONSIDERATIONS FOR BEST MANAGEMENT PRACTICES	PERSON(S) RESPONSIBLE	STANDARD CONTRACT PROVISIONS	STEWARDSHIP CONTRACT PROVISIONS
14.01	IV. A-C	TIMBER SALE PLANNING - To incorporate soil and water resource considerations into Timber Sale Planning	All Activities	<ol style="list-style-type: none"> 1. Unit design, mitigation, and effects analysis was done by IDT. 2. TSC will be prepared by PSF that will include management constraints and Design Criteria from EA. 3. Use standard interim RHCA widths unless modified through watershed analysis. 4. Use exiting skid trails where feasible. 	IDT has evaluated watershed characteristics and estimated response to proposed activities. EA identifies Design Criteria to protect soil and water resources. Timber sale contracts will include provisions to meet water quality, soils, and other resources as directed by the Decision.	IDT, PSF	N/A	N/A
14.02	IV. A	TIMBER HARVEST UNIT DESIGN - To insure that timber harvest unit design will secure favorable conditions of water flow, maintain water quality and soil productivity, and reduce soil erosion and sedimentation.	All Activities	<ol style="list-style-type: none"> 1. Cumulative effects analysis and unit design were performed by IDT. 2. The prescriptions and unit design are consistent with direction outlined in the considerations for Best Management Practices. 3. Use standard interim RHCA widths unless modified through watershed analysis. 4. Use exiting skid trails where feasible. 	Proposed activities were evaluated to estimate the potential watershed response. Prescriptions will be designed to assure an acceptable level of protection for soil and water resources. Management will protect soil/water values by avoiding sensitive areas, adjusting unit boundaries, adding specific BMPs to meet specific SWCPs, applying mitigation, and applying implementation/effectiveness monitoring.	IDT	N/A	N/A

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

**TABLE A2 – 3.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

SWCP	MT BMP	SWCP OBJECTIVE	APPLICABLE UNITS/ROADS	RECOMMENDED BEST MANAGEMENT PRACTICES BY IDT/TSA	CONSIDERATIONS FOR BEST MANAGEMENT PRACTICES	PERSON(S) RESPONSIBLE	STANDARD CONTRACT PROVISIONS	STEWARDSHIP CONTRACT PROVISIONS
14.03	N/A	USE OF SALE AREA MAPS (SAMs) FOR DESIGNATING SOIL AND WATER PROTECTION NEEDS - To delineate the location of protected areas and available water sources and insure their recognition, proper consideration, and protection on the ground.	All Activities	<ol style="list-style-type: none"> 1. Water courses identified and protected using SMZ buffers as a minimum. 2. Skidding on soil when moisture is <18%. 3. Use designated skid trails agreed to by TSA. 4. Use standard interim RHCA widths unless modified through watershed analysis. 	The IDT will identify water courses to be protected, unit boundaries, and other features. Ground verification and preparation of SAMs to be included in TSC will be done by PSF. TSA reviews areas of concern with purchaser before operations.	IDT, PSF, TSA	B(T)1.1 B(T)6.5 C(T)6.50# C(T)6.4#	B.1 G.5 K-G.5.0# K-G.4#
14.04	IV. A-2, B-1,2 VI. A	LIMITING THE OPERATION PERIOD OF TIMBER SALE ACTIVITIES - To minimize soil erosion, sedimentation, and a loss in soil productivity by insuring that the purchaser conducts his/her operations in a timely manner.	All Activities	<ol style="list-style-type: none"> 1. Units located on soils sensitive to compaction and/or displacement have been identified. 2. Designate units needing harvest on frozen or snow covered ground. 3. All other ground disturbing activities will occur during dry, frozen, or snow-covered conditions. 	If limited operating periods are identified and recommended during the analysis by the IDT, the PSF will prepare a contract that includes appropriate provisions.	IDT, PSF, TSA	B(T)6.31 B(T)6.311 B(T)6.6 C(T)6.6 C(T)6.316# C(T)6.4#	G.3.1 G.3.1.1 G.6 K-G.6 K-G.3.1.6# K-G.4#
14.05	IV. A-B III A-2-4	PROTECTION OF UNSTABLE AREAS - To protect unstable areas and avoid triggering mass movements of the soil mantle and resultant erosion and sedimentation.	All Activities	<ol style="list-style-type: none"> 1. Unstable landtypes will be identified during the planning process. 2. Units found to need further protection will use alternative yarding techniques, seasonal restrictions, and/or unit boundary adjustments. 	If the NEPA analysis concluded that soils/geology in the area were unstable, BMPs would be designed to prevent irreversible soil and water effects.	IDT, PSF, TSA	C(T)6.316# C(T)6.4#	K-G.3.1.6# K-G.4#

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

**TABLE A2 – 3.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

SWCP	MT BMP	SWCP OBJECTIVE	APPLICABLE UNITS/ROADS	RECOMMENDED BEST MANAGEMENT PRACTICES BY IDT/TSA	CONSIDERATIONS FOR BEST MANAGEMENT PRACTICES	PERSON(S) RESPONSIBLE	STANDARD CONTRACT PROVISIONS	STEWARDSHIP CONTRACT PROVISIONS
14.06	II	RIPARIAN AREA DESIGNATION - To minimize the adverse effects on riparian areas with prescriptions that manage nearby logging and related land disturbance activities.	All Activities	<ol style="list-style-type: none"> 1. Identify areas with or adjacent to wet areas. 2. Default RHCA widths will be adhered to unless modified through watershed analysis. SMZ widths will be used as a minimum if modification is proposed. 4. Areas found during sale layout will be reported to the Hydrologist and afforded the same protections as those identified earlier. 	All streams and wetlands in the project area will comply with FNF Forest Plan as amended by INFS. The width of the riparian areas will be decided upon by the IDT. These widths will be included on the sale area map, marked on the ground and included in the TSC.	IDT, PSF	B(T)1.1 B(T)6.5, C(T)6.4# C(T)6.41# C(T)6.50#	B.1 G.5 K-G.4# K-G.4.1# K-G.5.0#
14.07	IV, A-2 B-1	DETERMINING TRACTOR-LOGGABLE GROUND - To protect water quality from degradation caused by tractor logging ground disturbance.	All Activities	<ol style="list-style-type: none"> 1. Tractor loggable units have been identified during the planning process. 2. Those areas found not to be tractor loggable were designated as alternative logging systems or were dropped from the unit. 	IDT has identified tractor-loggable ground (in conjunction with personnel from timber operations) during transportation and timber sale planning process. The results have been used to determine intensity of and restrictions for land disturbance activities. TSC and SAM indicate areas and conditions under which tractors can operate.	IDT, PSF	B(T)1.1 B(T)6.42 C(T)6.4# C(T)6.316#	B.1 G.4.2 K-G.4# K-G.3.1.6#
14.08	IV, A-B	TRACTOR SKIDDING DESIGN - To minimize erosion and sedimentation and protect soil productivity by designing skidding patterns to best fit the terrain.	All Activities	<ol style="list-style-type: none"> 1. Identify units with designated or dispersed skid trails. 2. TSA and purchaser agree on proposed locations before operation. 	IDT has identified sensitive areas during the planning process. The TSA will execute the plan on the ground by locating the skid trails with the timber purchaser or by agreeing to the purchaser's proposed locations prior to operation.	IDT; TSA	B(T)6.422 C(T)6.4#	G.4.2 K-G.4#

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Appendix 2 - Management Requirements and Design Criteria

**TABLE A2 – 3.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

SWCP	MT BMP	SWCP OBJECTIVE	APPLICABLE UNITS/ROADS	RECOMMENDED BEST MANAGEMENT PRACTICES BY IDT/TSA	CONSIDERATIONS FOR BEST MANAGEMENT PRACTICES	PERSON(S) RESPONSIBLE	STANDARD CONTRACT PROVISIONS	STEWARDSHIP CONTRACT PROVISIONS
14.09	IV. A-2	SUSPENDED LOG YARDING IN TIMBER HARVESTING - To protect the soil from excessive disturbance and accelerated erosion and maintain the integrity of the riparian areas and other sensitive areas.	Cable Logging Units	<ol style="list-style-type: none"> Units that have slopes that are unsuitable for or sensitive to ground base skidding will be identified. Units with sustained slopes >40% will be designated cable harvest units. 	IDT recognizes the hazards associated with operating on steep and/or rocky slopes. Areas found to be of concern will use appropriate harvest systems that provide for a safe work environment and protect natural resources.	IDT, PSF	B(T)6.42 C(T)6.4# C(T)6.50#	G.4.2 K-G.4# K-G.5.0#
14.10	IV. A-5,6 B-4	LOG LANDING LOCATION AND DESIGN - To locate in such a way as to avoid soil erosion and water quality degradation.	All Activities	<ol style="list-style-type: none"> TSA and purchaser agree on landing locations before operation. Use minimum size and least excavation needed. No side-cast material into sensitive areas or waterways. Install proper drainage. 	TSA must agree to landing locations proposed by the purchaser. Approved landing locations will meet the criteria of: minimal size, least excavation needed, minimum skid roads necessary, no side-cast material into sensitive areas, and have proper drainage.	TSA	B(T)6.422 C(T)6.422	G.4.2.2 K-G.4.2.2
14.11	IV. A-5,6 B-4	LOG LANDING EROSION PREVENTION AND CONTROL- To reduce erosion and subsequent sedimentation from log landing through the use of mitigating measures.	All Activities	<ol style="list-style-type: none"> Proper drainage will be installed and maintained during operation. Landings will be scarified, seeded and fertilized upon completion of harvest activities. TSA will assess conditions and take necessary steps to ensure soil and water protection. 	PSF and TSA assess what is necessary to prevent erosion from landings and to ensure stabilization. It is up to the TSA to request technical assistance as needed.	PSF, TSA	B(T)6.6 B(T)6.64 C(T)6.6 C(T)6.632# C(T)6.633#	G.6 G.6.4 K-G.6 K-G.6.3.2# K-G.6.3.3#

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**TABLE A2 – 3.
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SWCP	MT BMP	SWCP OBJECTIVE	APPLICABLE UNITS/ROADS	RECOMMENDED BEST MANAGEMENT PRACTICES BY IDT/TSA	CONSIDERATIONS FOR BEST MANAGEMENT PRACTICES	PERSON(S) RESPONSIBLE	STANDARD CONTRACT PROVISIONS	STEWARDSHIP CONTRACT PROVISIONS
14.12	IV. A-C	EROSION PREVENTION AND CONTROL MEASURES DURING THE TIMBER SALE OPERATION - To ensure that the purchaser's operations shall be conducted reasonably to minimize soil erosion.	All Activities	<ol style="list-style-type: none"> 1. Designate units with seasonal restrictions. 2. Do not operate during wet periods including spring-snowmelt and/or intense or long-duration rain storms. 3. TSA ensures that erosion control is kept current and prevents operation when excessive impacts are possible. 	PSF and TSA sets purchaser's responsibility to prevent soil/water resource damage in TSC. TSA ensures that erosion control is kept current and prevents operation when excessive impacts are possible.	PSF, TSA	A16 B(T)6.6 B(T)6.64 C(T)6.6 C(T)6.601# C(T)6.316#	A.16 G.6 G.6.4 K-G.6 K-G.6.6.1 K-G.3.1.6#
14.13	IV. B 5,6	SPECIAL EROSION PREVENTION MEASURES ON AREAS DISTURBED BY HARVEST ACTIVITIES - To prevent erosion and sedimentation on disturbed areas.	All Activities	<ol style="list-style-type: none"> 1. Waterbar, slash, seed, and/or fertilize skid trails and landings. 2. Rehabilitate constructed skid trails and temporary roads. 3. BMPs may be adjusted by the TSA to meet operational requirements. 	IDT identifies locations needing special stabilization measures. If any such areas are identified, BMPs may be adjusted by the TSA to meet operational requirements.	IDT, TSA	C(T)6.601# C(T)6.32# C(T)6.633#	K-G.6.0.1# K-G.6.3.2# K-G.6.3.3#
14.14	IV. B 5	REVEGETATION OF AREAS DISTURBED BY HARVEST ACTIVITIES - To establish a vegetative cover on disturbed areas to prevent erosion and sedimentation.	All Activities	<ol style="list-style-type: none"> 1. Seed and fertilize areas of exposed soil with FNF approved vegetative and fertilizer mix. 	IDT has established vegetation and fertilizer mix to be used in the project area with outlines on the extent to which it should be used. TSA is responsible for seeing that revegetation work required by purchaser is done correctly and in a timely manner. The purchaser will be responsible for revegetation immediately after the completion of harvest. Funds will be collected for the District to do follow-up seeding/fertilizing in years two and three after harvest.	IDT, TSA	C(T)6.01# C(T)6.633#	K-G.6.0.1# K-G.6.3.3#

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14.15	IV. A-4,5 B-5,6	EROSION CONTROL ON SKID TRAILS - To protect water quality by minimizing erosion and sedimentation derived from skid trails.	All Activities	<ol style="list-style-type: none"> 1. Ensure proper skid trail location. 2. Ensure proper drainage on skid trails. 3. Rehabilitate constructed skid trails and temporary roads. 4. Ensure maintenance of erosion control structures by purchaser. 	Erosion control measures may be recommended by the IDT, but site-specifically adjusted by the TSA. TSA will ensure erosion control measures are applied prior to expected hydrologic events (spring runoff, high-intensity storms, etc.). Maintenance of erosion control structures by the purchaser may be necessary and requested by the TSA.	TSA	B(T)6.6 B(T)6.65 B(T)6.66 C(T)6.6 C(T)6.633#	G.6 G.6.5 G.6.6 K-G.6 K-G.6.3.3#
14.16	IV. B-2	WET MEADOW PROTECTION DURING TIMBER HARVESTING - To avoid damage to the ground cover, soil, and water in meadows.	All Activities	<ol style="list-style-type: none"> 1. Identify units with or adjacent to wet meadows. 2. Units with unmapped wet areas will be reported to Hydrologist and afforded the same protection as those identified during the planning process. 3. Standard interim RHCA widths will be adhered to unless modification is in place. 2. SMZ law will be met or exceeded. 	IDT has identified areas needing special protection. PSF will verify the areas needing protection and prepare the contract to prevent damage to meadows. The TSA will be responsible for on-the-ground protection of meadows. If meadows are found by the TSA during operations, it is their responsibility to either afford them the proper protection or pursue a contract modification.	IDT, PSF, TSA	B(T)1.1 B(T)6.422 B(T)6.61 C(T)6.4# C(T)6.62#	B.1 G.4.2.2 G.6.1 K-G.4# K-G.6.2#
14.17	V. A-C	STREAM CHANNEL PROTECTION (IMPLEMENTATION AND ENFORCEMENT) - Protect natural stream flows; provide unobstructed passage of flows; reduce sediment input; and restore flow if diverted by timber sale activity.	All Activities	<ol style="list-style-type: none"> 1. Standard interim RHCA widths will be adhered to unless modification is in place. 2. SMZ widths will be used at a minimum if modification in place. 3. SMZ law will be met or exceeded. 	IDT has identified the location of channels in the decision area. PSF will prepare a SAM locating the channels needing protection. Layout crew marks boundaries and trees according to HB-731 and FP guidelines. TSA will see that TSC items are carried out on the ground. Technical assistance will be consulted as needed.	IDT, PSF, TSA	B(T)1.1 B(T)6.5 B(T)6.6 C(T)6.50# C(T)6.6	B.1 G.5 G.6 K-G.5.0# K-G.6

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14.18	IV. A-C	EROSION CONTROL STRUCTURE MAINTENANCE - To insure that constructed erosion control structures are stabilized and working effectively.	All Activities	1. During the period of the TSC, the purchaser is responsible for maintaining their erosion control features.	During the period of the TSC, the purchaser is responsible for maintaining their erosion control features. If work is needed beyond this time, the District will pursue other sources of funding.	TSA	B(T)6.66 B(T)6.67	G.6.6 G.6.7
14.19	IV. A-C	ACCEPTANCE OF TIMBER SALE EROSION CONTROL MEASURES BEFORE SALE CLOSURE - To assure the adequacy of required erosion control work on timber sales.	All Activities	1. TSA reviews erosion prevention work before each harvest unit is considered complete. 2. The inspection will determine if the work is acceptable and will meet the objective of the erosion control feature.	A careful review of erosion prevention work will be made by the TSA before each harvest unit is considered complete. The inspection will determine if the work is acceptable and will meet the objective of the erosion control feature. A feature is considered not acceptable if it does not meet standards or is not expected to protect soil/water values. Technical assistance will be used as necessary.	TSA	B(T)6.36	G.3.6
14.20	IV. C	SLASH TREATMENT IN SENSITIVE AREAS - To protect water quality by protecting sensitive tributary areas from degradation that would result from using mechanized equipment for slash disposal.	All Activities	1. Where harvest is proposed within riparian areas, either slash should be removed with the tree or scattered and not treated. 2. Mechanical fuels treatments should not be used on sensitive land types.	All activities will comply with the FNF Forest Plan as amended by INFISH. Where harvest within riparian areas is proposed, either the slash would be removed with the tree or scattered and not treated.	TSA, FMO	B(T)6.5 B(T)6.7 C(T)6.50# C(T)6.7 C(T)6.71 C(T)6.753	G.5 G.7 K-G.5.0# K-G.7# K-G.7.1 K-G.7.5.3
14.22	N/A	MODIFICATION OF THE TSC - To modify the TSC if new circumstances or conditions indicate the timber sale will cause irreversible damage to soil, water, or watershed values.	All Activities	1. Environmental modification procedure.	If TSC is not adequate to protect soil/water resources, the TSA and Contracting Officer are responsible for recommending modification of the TSC.	TSA	B(T)8.33	i.3.3

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15.01	III. A-E	GENERAL GUIDELINES FOR TRANSPORTATION PLANNING - To introduce soil and water resource considerations into transportation planning.	All Roads	<ol style="list-style-type: none"> 1. Complete a roads analysis. 2. Transportation plans include installation and maintaining proper drainage. 	The IDT has evaluated watershed characteristics and estimated the response of soil and water resources to proposed transportation alternatives and activities.	IDT, ER	N/A	
15.02	III. A-B	GENERAL GUIDELINES FOR THE LOCATION AND DESIGN OF ROADS AND TRAILS - To locate and design roads and trails with minimal soil and water impact while considering all Design Criteria.	New Road and Trail Construction	<ol style="list-style-type: none"> 1. Follow INFS Standards and Guidelines for road management. 2. Identify sensitive land types, riparian areas, and wetlands during planning. 3. Use the minimum amount of roads and trails necessary. 	The IDT has insured that the location and design of roads and trails are based on multiple resource objectives. Mitigation measures have been designed to protect the soil and water resources identified in the NEPA process. Contract provisions will be prepared by the ER that meets the soil and water resource protection requirements.	IDT, ER		
15.03	III. A-E	ROAD AND TRAIL EROSION CONTROL PLAN - To prevent, limit, and mitigate erosion, sedimentation, and resulting water quality degradation prior to the initiation of construction by timely implementation of erosion control practices.	New Road and Trail Construction	<ol style="list-style-type: none"> 1. Seed and fertilize disturbed areas. 2. Install proper ditching and road slope. 3. Install proper drainage. 4. Incorporate road grade breaks. 5. Use minimum road or trail length/width necessary. 6. Avoid wet areas or areas of sensitive soil types. 	IDT has established soil/water conservation objectives and mitigation measures. ER will then prepare a contract that reflects the objectives. ER will see that erosion control measures are approved and completed in a timely manner. IDT reviews projects to check effectiveness of erosion control features.	IDT, ER	B(T)6.31 B(T)6.312 B(T)6.6 C(T)6.601#	G.3.1 G.3.1.2 G.6 K-G.6.0.1#
15.04	III. D 1, 4	TIMING OF CONSTRUCTION ACTIVITIES - To minimize erosion by conducting operations during minimal runoff periods.	New Road and Trail Construction	<ol style="list-style-type: none"> 1. Avoid construction during wet periods. 	IDT has outlined detailed erosion control measures in NEPA process. ER puts these measures into contract provisions. Compliance is assured by Contracting Officer or ER.	IDT, ER	B(T)6.31 B(T)6.312 B(T)6.6 SPS 204	G.3.1 G.3.1.2 G.6

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15.05	III. A-E	SLOPE STABILIZATION AND PREVENTION OF MASS FAILURES - To reduce sedimentation by minimizing the chances for road-related mass failures, including landslides and embankment slumps.	New Road and Trail Construction	<ol style="list-style-type: none"> 1. Avoid construction across unstable areas. 2. Construct embankments following approved engineering practices. 3. Use minimum road or trail length/width necessary. 	Road and trail construction in mountainous terrain requires cutting and loading natural slopes which may lead to landslides and/or embankment failures. In areas with intrinsic slope stability problems, appropriate technical resource personnel must be involved in an interdisciplinary approach to route location.	IDT,; ER	N/A	
15.06	III. A-E	MITIGATION OF SURFACE EROSION AND STABILIZATION OF SLOPES - To minimize soil erosion from road cut slopes, fill slopes, and travel ways.	All Haul Roads	<ol style="list-style-type: none"> 1. Seed and fertilize cut and fill slopes. 2. Install proper ditching and road slope. 3. Install proper drainage. 4. Incorporate road grade breaks. 5. Install ditch relief culverts before/after stream crossings. 	IDT has outlined detailed erosion control measures in the NEPA process. Stabilization techniques are included in contract provisions. Compliance is assured by Contracting Officer or ER.	IDT, ER	SPS 203, 204, 206A 210, 412 619, 625, 626 630 B(T)5.3 B(T)6.6 B(T)6.63 B(T)6.66 B(T)6.312 C(T)5.314# C(T)6.6 C(T)6.601#	F.3 G.6 G.6.3 G.6.6 G.3.1.2 K-F.3.1.4# K-G.6 K-G.6.0.1#
15.07	III. E-2	CONTROL OF PERMANENT ROAD DRAINAGE - To minimize the erosive effects of concentrated water and degradation of water quality by proper design and construction of road drainage systems and drainage control structures.	All Haul Roads	<ol style="list-style-type: none"> 1. Avoid long, steep grades. 2. Maintain adequate surface drainage. 3. Prevent erosion of culvert fills. 4. Maintain ditches. 5. Ditch relief culverts before/after stream crossings. 	IDT has identified locations, Design Criteria, drainage control features, and mitigation. Compliance will be assured by the ER/Contracting Officer.	ER	B(T)5.3 B(T)6.6 C(T)5.31# C(T)6.6	F.3 G.6 K-F.3.1# K-G.6
15.08	III. D	PIONEER ROAD CONSTRUCTION - To minimize sediment production and mass wasting associated with pioneer road construction.	New Road and Trail Construction	<ol style="list-style-type: none"> 1. Ensure stable slopes during construction. 2. Seed and fertilize exposed soil. 3. Avoid construction during wet periods. 4. Use slash filter windrows. 	ER/Contracting Officer will be responsible for enforcing contract specifications. The purchaser is responsible for submitting an operating plan that includes erosion control measures.	ER	B(T)5.23 B(T)6.31 B(T)6.311 B(T)6.312 B(T)6.6 C(T)6.601# SPS 204	F.2.3 G.3.1 G.3.1.1 G.3.1.2 G.6 K-G.6.0.1#

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15.09	III. E-7,8	TIMELY EROSION CONTROL MEASURES ON INCOMPLETE ROADS AND STREAM CROSSING PROJECTS - To minimize erosion of and sedimentation from disturbed ground on incomplete projects.	All Road construction, reconstruction, and maintenance	<ol style="list-style-type: none"> 1. Avoid construction during wet periods. 2. Use slash filter windrows or silt fence. 3. Seed and fertilize disturbed areas. 	IDT has identified project location and mitigation measures in NEPA process. Protective measures will be kept current on all areas of disturbed, erosion-prone areas. TSA ensures contract compliance.	IDT, TSA	B(T)5.23 B(T)6.31 B(T)6.6 B(T)6.66 C(T)6.6 C(T)6.601#	F.2.3 G.3.1 G.6 G.6.6 K-G.6 K-G.6.0.1#
15.10	III. D-8	CONTROL OF ROAD CONSTRUCTION, EXCAVATION, AND SIDE-CAST MATERIAL - To reduce sedimentation from unconsolidated excavated and side-cast material caused by road construction, reconstruction, or maintenance.	All Road construction, reconstruction, and maintenance	<ol style="list-style-type: none"> 1. Do not side-cast into waterways or sensitive areas. 2. Use slash filter windrows or silt fence. 	IDT has identified project location and mitigation measures in NEPA process. Protective measures will be kept current on all areas of disturbed, erosion-prone areas. TSA ensures contract compliance.	IDT, TSA	B(T)5.3 C(T)5.31# SPS 203 SPS 204	F.3 K-F.3.1#
15.11	VII. A-1,2	SERVICING AND REFUELING EQUIPMENT - To prevent contamination of waters from accidental spills of fuels, lubricants, bitumens, and other harmful materials.	All Activities	<ol style="list-style-type: none"> 1. Ensure proper fuel storage and transportation. 2. Keep fuel from streams, wetlands, ponds, and lakes. 	ER/TSA/Contracting Officer will designate the location, size, and uses of service refueling areas. All projects will adhere to the FNF Hazardous Substance Spill Plan in case of accidents.	ER, TSA	B(T)6.222 B(T)6.34 B(T)6.341	G.2.2.2 G.3.4 G.3.4.1
15.12	III A. 4	CONTROL OF CONSTRUCTION IN RIPARIAN AREAS - To minimize the adverse effects on riparian areas from roads.	New Road and Temporary Road Construction	<ol style="list-style-type: none"> 1. Follow INFS Standards and Guidelines for construction within riparian areas. 2. Use slash filter windrows or silt fence. 3. Install ditch relief culverts and surface water deflectors before/after stream crossings. 	Proposed new and temporary roads will adhere to guidelines in the Montana Streamside Management Zone Law (HB-731). All road activities will follow INFS Standards and Guidelines for road management.	ER, TSA	B(T)6.5 B(T)6.62 C(T)6.50# SPS 206 SPS 206A	G.5 G.6.2 K-G.5.0#

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15.13	V. C-1	CONTROLLING IN-CHANNEL EXCAVATION - To minimize stream channel disturbances and related sediment production.	All Road construction, reconstruction, and maintenance	<ol style="list-style-type: none"> 1. Use silt fence to minimize introduced sediment. 2. Use minimum amount of road. 3. Construct minimum number of crossings. 	BMP improvements at crossings would adhere to the guidelines in Montana Streamside Management Zone Law (HB-731) and the INFS Standards and Guidelines for road management.	ER, TSA	B(T)6.5 SPS 204 SPS 206 206A	G.5
15.14	V. A, C	DIVERSION OF FLOWS AROUND CONSTRUCTION SITES - To minimize downstream sedimentation by insuring all stream diversions are carefully planned.	All Work at Stream Crossings	<ol style="list-style-type: none"> 1. Divert stream flow around construction. 2. Use silt fence to minimize introduced sediment. 3. Construction during low-flow 	The IDT has determined, where stream crossings meet multiple resource objectives, the crossings would require a State 124 permit. This would require the State Fish, Wildlife, and Parks to review the adequacy of the proposed mitigation. Compliance with contract provisions would be done by the ER.	IDT, ER	B(T)6.5 B(T)6.31 C(T)6.50# C(T)6.6	G.5 G.3.1 K-G.5.0# K-G.6
15.15	V. A-C	STREAM CROSSINGS ON TEMPORARY ROADS - To keep temporary roads from unduly damaging streams, disturbing channels, or obstructing fish passage.	All Roads	<ol style="list-style-type: none"> 1. Consult Hydrologist on placement of crossing 2. Use minimum number of stream crossings. 3. Construction during low-flow. 4. Follow INFS Standards and Guidelines for construction within riparian areas. 	The IDT identifies areas in need of a temporary road during the NEPA process. Proposed stream crossings would adhere to the guidelines in Montana Streamside Management Zone Law (HB-731).	PSF, ER, TSA	N/A	
15.16	V. C 1-7	BRIDGE AND CULVERT INSTALLATION - To minimize sedimentation and turbidity resulting from excavation for in-channel structures.	All Road construction, reconstruction, and maintenance	<ol style="list-style-type: none"> 1. Installation should be done during periods of low flow. 2. In-stream sediment retention devices should be used throughout implementation. 	IDT has identified project location and mitigation measures in NEPA process. Protective measures will be kept current on all areas of disturbed, erosion-prone areas. TSA ensures contract compliance.	IDT, TSA	C(T)5.31# (T-310) B(T)6.312	K-F.3.1# (T-618) G.3.1.2

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15.17	III. D-9	REGULATION OF BORROW PITS, GRAVEL SOURCES, AND QUARRIES - To minimize sediment production from borrow pits, gravel sources, and quarries and limit channel disturbance in those gravel sources suitable for development in floodplains.	N/A			ER	B(T)6.5 C(T)6.50#	G.5 K-G.5.0#
15.18	III. D-8	DISPOSAL OF RIGHT-OF-WAY AND ROADSIDE DEBRIS - To insure that debris generated during road construction is kept out of streams and prevent slash and debris from subsequently obstructing channels.	All Road construction, reconstruction, and maintenance	1. Debris and slash generated during road construction should not be side-cast into streams.	Proposed road construction will adhere to the guidelines in the Montana Streamside Management Zone Law (HB-731).	ER	Std Spec 201 SPS 201	
15.19	III. A	STREAM BANK PROTECTION – To minimize sediment production from stream banks and structural abutments in natural waterways.	All Road construction, reconstruction, and maintenance	1. Take precautions to minimize or eliminate disturbance to stream banks. 2. Maintain in-stream structures.	IDT has identified project location and mitigation measures during NEPA process. Protective measures will be kept current on all areas of disturbed soils. TSA and ER ensure contract compliance.	IDT, ER, TSA	Std Spec 619	
15.20	N/A	WATER SOURCE DEVELOPMENT CONSISTENT WITH WATER QUALITY PROTECTION - To supply water for road construction and maintenance and fire protection while maintaining water quality.	N/A			ER, FMO	Std Spec 207	

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15.21	III. E	MAINTENANCE OF ROADS - To maintain all roads in a manner that provides for soil and water protection by minimizing rutting, failures, side-cast, and blockage of drainage facilities.	All Road reconstruction, and maintenance	1. Maintain all roads in a manner that provides for soil and water protection	Road maintenance associated with a timber sale is the responsibility of purchaser. The ER/TSA will ensure that the purchaser maintains roads according to the appropriate maintenance level.	ER, TSA	B(T)5.12 B(T)5.3 B(T)6.6 C(T)6.6 C(T)5.31#	F.1.2 F.3 G.6 K-G.6 K-F.3.1#
15.22	III. E-1	ROAD SURFACE TREATMENT TO PREVENT LOSS OF MATERIALS - To minimize the erosion of road surface materials and, consequently, reduce the likelihood of sediment production.	All Haul Roads	1. Maintenance of road surface should include proper blading and/or dust abatement. 2. Use crush-gravel where necessary.	Protective measures will be kept current on all areas of disturbed, erosion-prone areas. ER ensures contract compliance.	IDT, ER	B(T)5.3 C(T)5.31# C(T)5.314#	F.3 K-F.3.1# K-F.3.1.4#
15.23	III. E-6	TRAFFIC CONTROL DURING WET PERIODS - To reduce the potential for road surface disturbance during wet weather and reduce sedimentation.	All Haul Roads	1. Avoid hauling during wet periods.	Road restrictions and traffic control measures will be implemented on all haul roads when damage would occur during spring breakup. The decision to restrict a road is made by the ER. Hauling restrictions would be controlled by the TSA.	ER, TSA	B(T)6.6 C(T)6.6 C(T)5.316# C(T)5.41#	G.6 K-G.6 K-F.3.1.6# K-F.4.1#
15.24	III.E-4 VI. A-B	SNOW REMOVAL CONTROLS - To minimize the impact of snow melt on road surfaces and embankments and reduce the probability of sediment production resulting from snow removal operations.	All Winter Haul Roads	1. Be careful not to leave snow berm at edge of road. 2. Ensure proper drainage by opening sections of berm to allow water to leave road surface. 3. Ensure no side cast material enters waterways.	Snow removal will be kept current on all roads associated with winter logging operations. The TSA ensures compliance with contract provisions.	IDT, TSA	C(T)5.316# Std Spec 203.09	K-F.3.1.6#

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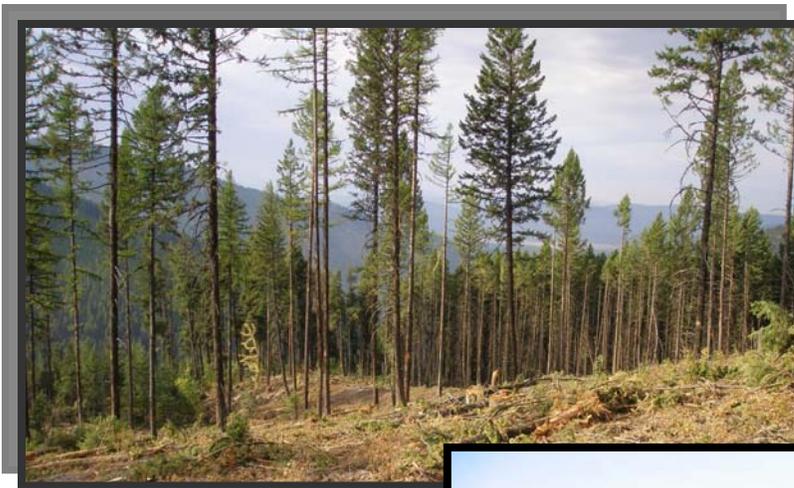
**TABLE A2 – 3.
MANAGEMENT REQUIREMENTS AND DESIGN CRITERIA**

SWCP	MT BMP	SWCP OBJECTIVE	APPLICABLE UNITS/ROADS	RECOMMENDED BEST MANAGEMENT PRACTICES BY IDT/TSA	CONSIDERATIONS FOR BEST MANAGEMENT PRACTICES	PERSON(S) RESPONSIBLE	STANDARD CONTRACT PROVISIONS	STEWARDSHIP CONTRACT PROVISIONS
15.25	III. E 7, 8	OBLITERATION OF TEMPORARY ROADS - To reduce sediment generated from temporary roads by obliterating them at the completion of their intended use.	All Temporary Roads	<ol style="list-style-type: none"> 1. Re-contour road fully where feasible. 2. Seed and fertilize exposed soil. 3. Pull slash and woody debris back onto rehabilitated road. 	This work will be done on all new temporary roads in the decision area. The work will be done by the purchaser with compliance by the TSA.	TSA	B(T)6.63 C(T)6.6 C(T)6.632# C(T)6.633# C(T)6.601#	G.6.3 K-G.6 K-G.6.3.2# K-G.6.3.3# K-G.6.0.1#
18.03	IV. C -8	PROTECTION OF SOIL AND WATER FROM PRESCRIBED BURNING EFFECTS - To maintain soil productivity, minimize erosion, and prevent ash, sediment, nutrients, and debris from entering surface water.	All Prescribed Burning	<ol style="list-style-type: none"> 1. Follow INFS Standards and Guidelines for burning in RHCAs. 2. Adhere to SMZ Law. 3. Where harvest within riparian areas is proposed, either the slash should be removed with the tree or scattered and not treated. 	Prescribed burning adjacent to riparian areas will adhere to guidelines in the Montana Streamside Management Zone Law (HB-731). Prescribed burn plans identify the conditions necessary to prevent soil damage and meet site preparation objectives.	FMO	N/A	

Porter Mount Management Project
Appendix 2 - Management Requirements and Design Criteria

Porter Mount Management Project

Decision Notice and Finding of No Significant Impact



Appendix 3 Monitoring Plan

Appendix 3 - Monitoring Plan

Introduction

The following monitoring matrix describes monitoring associated with the Porter Mount Management Project and summarizes the purpose, methods, and expected results and uses of the proposed monitoring activities.

**TABLE A3-1
SUMMARY OF MONITORING ACTIVITIES**

WHAT	WHERE	WHEN / DURATION	WHY	WHO	EXPECTED RESULTS AND USE
FOREST ROADS					
Monitor and oversee temporary road construction and skid trails	Temporary roads	Throughout duration of project implementation	Insure road construction activities comply with contract specifications	Contracting Officer, Forest Service Representative, and Timber Sale Administrator	Routinely determine compliance with contract specifications
Monitor and oversee condition of permanent roads	Permanent roads	Throughout duration of project implementation	Insure activities are not negatively affecting road condition and adjoining resources	Contracting Officer, Forest Service Representative, and Timber Sale Administrator	Routinely determine road integrity and BMP compliance
SOIL QUALITY					
Monitor soil moisture and snow conditions	All harvest units	Prior to implementation	Assure proper conditions exist to minimize soil detrimental disturbance	Sale Administrator	Assure proper conditions exist to minimize soil detrimental disturbance
Monitor levels of detrimental soil disturbance in harvest units	Units 16, 20, 25, and 48	After all activities are complete	Evaluate if Design Criteria are adequate	Forest Soil Scientist or Representative	Modify future Design Criteria to better protect soils, if necessary

Porter Mount Management Project Environmental Assessment
Appendix 3 - Monitoring Plan

**TABLE A3-1
SUMMARY OF MONITORING ACTIVITIES**

WHAT	WHERE	WHEN / DURATION	WHY	WHO	EXPECTED RESULTS AND USE
WATER RESOURCE					
Review implementation of SMZs and BMPs	Throughout project area	Throughout project implementation	Ensure compliance with State Water Quality Standards	Sale Administrator on an ongoing basis and a Forest BMP Audit Team if the sale is selected for such audit.	Full compliance with State Regulations
Repeat Pfankuck Channel Stability Surveys	Selected stream reaches below activities	Before and after completion of activities, then repeated in 5 years	Monitor reaction of stream from cumulative effects	Hydrologist or trained personnel	No major changes in channel morphology linked to activities
FOREST VEGETATION					
Conduct Reforestation Surveys	All planting units	First, third, and fifth year after planting occurs	Determine regeneration success	Silviculturist	Assure adequate stocking of preferred species occurs
Contract review, prior to advertisement	Office	Prior to advertisement	Insure contract complies with the NEPA Decision	Sale Administrator, Harvest Inspector, Sale Prep Forester, and Engineer	Assure compliance with contract specifications
Monitor and oversee vegetation treatments (commercial and noncommercial)	All treatment units	Throughout duration of project implementation	Insure treatment activities comply with contract specifications	Contracting Officer, Sale Administrator, Harvest Inspector, and Silviculturist	Assure compliance with contract specifications
Conduct post treatment surveys. Monitor the changes in forest structure, composition, insect and disease conditions	All treatment units	Immediately following treatment and periodically thereafter as specified in the silvicultural prescription	Determine how well treatment objectives were met and to gather data as needed for possible follow-up treatments	Silviculturist	Determine the effectiveness of the treatments. This information will be used in making future recommendations for similar forest health projects

Porter Mount Management Project Environmental Assessment
Appendix 3 - Monitoring Plan

**TABLE A3-1
SUMMARY OF MONITORING ACTIVITIES**

WHAT	WHERE	WHEN / DURATION	WHY	WHO	EXPECTED RESULTS AND USE
FUELS REDUCTION					
Conduct post treatment surveys to monitor effectiveness of prescribed burn in maintaining canopy cover	Ecosystem Burn Unit	One year following Ecosystem Burn	Monitor effectiveness of maintaining canopy cover	Assistant Fuels Management Officer	Assure compliance with Management Area 9 requirements
INVASIVE PLANTS					
Noxious Weed Surveys	Rock outcrops in stands 1090212, 1090213, and 109013	First and second year following implementation	To determine the presence and/or spread of noxious weeds and needed containment or eradication measures	Botanist, Noxious Weed Specialist, or Weed Crew	Determine if weed control measures should be considered
Post Harvest Weed Surveys and Treatment as needed.	All (ground disturbed areas) treatment units and lands affected by activities; slash pile burns; and all existing and temporary system roads used for the project.	Annually, starting at year one through 3 years following harvest / haul activities	To determine the presence and/or spread of noxious weeds and needed containment or eradication measures, and to future direct treatment activities	Botanist, Noxious Weed Specialist, or Weed Crew, or Contractor	Determine if weed control measures should be considered.

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Porter Mount Management Project

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Appendix 4 Response to Public Comments

Porter Mount Management Project
Appendix 4 – Response to Comments

**TABLE A4-1.
RESPONSE TO COMMENTS**

Comment Letter		Response
 <p style="text-align: right;">490 N. Meridian Road Kalispell, MT 59901 (406) 752-5501 FAX (406) 257-0349 10/29/2007 REF:MD062-07.doc</p> <p>Steve Brady, District Ranger Porter Mount Management Project Swan Lake Ranger District 200 Ranger Station Road Bigfork, MT 59911</p> <p>Dear Mr. Brady,</p> <p>Thank you for the opportunity to comment on the Porter Mount Management Project Environmental Assessment. The project area includes important whitetail deer habitat and significant fishery values.</p> <p>FWP would like the Flathead Forest to consider the impacts of the timber sale on wintering white-tailed deer herds. White-tailed deer typically winter under a closed canopy (often Douglas Fir) where winter temperatures are mitigated by thermal properties and there is more snow intercept characteristics. Attached is a final report summarizing 13 years of detailed FWP white-tailed deer research in the Salish Mountains. We have tabbed two relevant sections in the report. Please feel free to call Dr. Alan Wood (one of the authors) at the FWP headquarters if you have any questions about the report.</p>	<p>← 1</p> <p>← 2</p>	<p>Response to Comment #1: Thank you for your comments.</p> <p>Response to Comment #2: Thank you for the FWP Report on Deer Research in the Salish Mountains. We have this document and utilized it during the formulation of units and Design Criteria.</p> <p>The Porter Mount Area has historically provided year-round habitat for White-tailed Deer. In the Porter Mount Area, under our Forest Plan, we have designated four winter range areas. The existing amount of thermal cover on each of these winter range areas is 50 percent or greater. The EA considered the impacts to White-tailed Deer on pages 3-167 thru 173.</p> <p>The Selected Alternative, Alternative B-Modified proposes treatments in white-tailed deer winter range. There is 294 acres of Commercial Thinning, 63 acres of Sanitation Harvest, and an Ecosystem Burn of 128 acres proposed in lands designated as white-tailed deer winter range. In the Commercial Thin and Sanitation Units, the tree canopy closure following treatment would be at least 50 percent in winter range areas (Units 2, 15, 32, 36, and 52). In the proposed Ecosystem Burn Unit (Unit 1), the objective is to underburn and maintain thermal cover in the stands. There is no regeneration harvest (Seed Tree of Clearcut with Reserve Trees) proposed in white-tailed deer winter range. Goals, objectives, and standards in the Flathead Forest Plan, specific to managing white-tailed deer have been followed in the preparation and analysis of the Porter Mount Project.</p>

Porter Mount Management Project
Appendix 4 – Response to Comments

**TABLE A4-1.
RESPONSE TO COMMENTS**

Comment Letter		Response
<p>As discussed in the Porter Mount Management Project EA, Rogers Lake contains an arctic grayling population used as a wild brood stock and provides a genetic refuge for an indigenous grayling population in the Red Rocks Drainage in southwestern Montana. Grayling spawn in the small tributary that flows out of the project area. As stated in the EA, the tributary is currently degraded due to past forest management activities within the drainage. Although, the WATSED modeling predicts only an additional one percent increase in peak flows above the current 13 percent above baseline conditions, we are concerned that the additional impact may further degrade spawning conditions. The grayling appear sensitive to the modified hydrograph, specifically the duration of the runoff. In years where the runoff is short in duration (as it has been at times in the last decade), flows drop prior to grayling spawning and fish do not move into the stream. One concern is that the increase in peak flow will result in a sharper peak in the hydrograph and more rapid drop in discharge. In Units 15, 17, and 18, please consider implementation of the most protective measures possible to minimize impacts.</p>	<p>← 3</p>	<p>Response to Comment #3: In Alternative B - Modified, Unit 18 has been deferred due to the amount of braided channels and wet areas existing in the stand. We also agree that this unit possesses unique water and vegetation features which should be protected.</p> <p>Additional protection has been afforded by modification of a portion of Unit 17 in Alternative B from a Seed Tree regeneration harvest to a Commercial Thin. This unit is designated as Unit 53 on the project area map.</p> <p>Concerning Units 15 and 17, no harvest activity will take place within INFISH Riparian Habitat Conservation Areas identified for these stands. Our Fish Biologist believes that the most sensitive area of Grayling Creek is the last 656 feet of the stream before its confluence with Rogers Lake. With the incorporation of Design Criteria such as avoiding all activity within 150 feet of perennial streams and 100 feet of intermittent streams in these units, activities associated with Alternative B-Modified will not retard the attainment of riparian management objectives.</p>

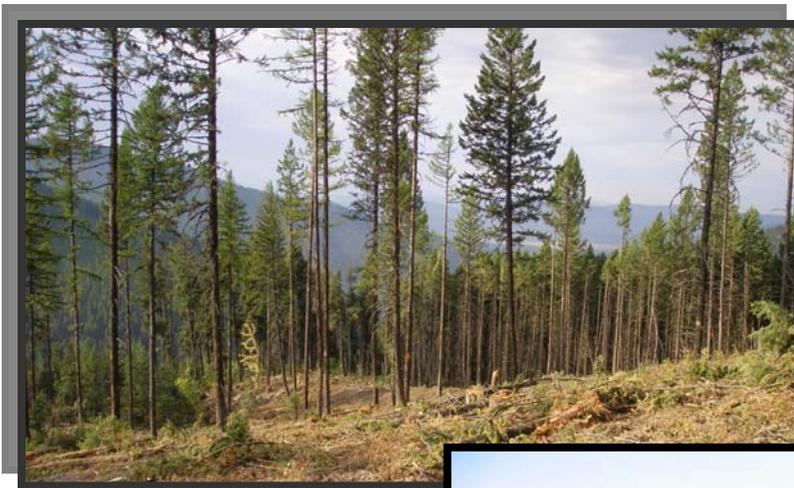
Porter Mount Management Project
Appendix 4 – Response to Comments

**TABLE A4-1.
RESPONSE TO COMMENTS**

Comment Letter		Response
 <p>November 5, 2007</p> <p>Steve Brady Swan Lake Ranger District 200 Ranger Station Road Bigfork, MT. 59911</p> <p>RE: Comments on Porter Mount EA</p> <p><i>Comments submitted via e-mail, please acknowledge receipt.</i></p> <p>Steve,</p> <p>I support Action Alternative B. I am still concerned about the economic and logistical viability of the small amounts of helicopter involved.</p> <p>Please keep me on the mailing list for information regarding this project. Thank you for the opportunity to comment.</p> <p>Sincerely,</p> <p>Chris Damrow Forester</p>	<p>← 1</p> <p>← 2</p>	<p>Response to Comment #1: Your preference for Alternative B is noted.</p> <p>The Selected Alternative, Alternative B - Modified incorporates temporary road and skid road construction from Alternative B to access harvest units. This alternative will result in less reliance on more expensive helicopter yarding and indicates a higher degree of sale viability under more market conditions than the original Alternative C. Because Alternative B - Modified treats less acres than Alternative B, it would have a slightly lower revenue than Alternative B. I feel the Selected Alternative, as modified in this decision, best meets the purpose and need for the Porter Mount Project while also being responsive to resource issues identified through the analysis process and public comments. As described in the rationale for the decision, though the option to include the helicopter portions of the units will be authorized by this decision, actual inclusion of the helicopter portions of units in the project offering will be dependent on economic conditions at the time of actual offer.</p>

Porter Mount Management Project

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Appendix 5 Errata

Appendix 5 – Errata

ERRATA

This errata contains a listing of corrections to the Porter Mount EA and additional information. Bold print indicates a specific correction or an addition in text or data. These changes were reviewed by the Deciding Official prior to the signing of the decision documented in the Decision Notice. The changes were determined to not affect the conclusions presented in the EA.

<u>Location</u>	<u>Description of Correction</u>
2-9	Table 2-8 in EA, “ Thin From Below Non-Commercial ” Treatment should be listed under a “Non-Commercial” Harvest Category instead of under “Commercial Harvest Treatments”.
2-16	Table 2-12, Bald Eagle should be deleted under the heading “Wildlife – T & E Species”.
2-19	Table 2-13, the last sentence in the 2 nd paragraph should be replaced with the following: “ Units 25 and 36 should be logged under winter conditions only to avoid impacts of additional skid trails. ”
Map 2-2	Homestead Creek is shown as an “intermittent” stream. This creek is “perennial” and is displayed correctly on the maps included in this decision.

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