

## ***APPENDIX A. SITE-SPECIFIC MITIGATION MEASURES***

The following mitigation measures are listed by resource area. Implementation of these measures is considered mandatory and the analysis of effects assumes the measures are implemented and effective to the extent noted for each measure. The mitigation measures apply to all activities in Modified Alternative 5, unless specific harvest units or roads are mentioned. Where applicable, these measures meet the requirements of the State Best Management Practices (BMP), as well as requirements of the National Forest Management Act (NFMA) for protection of the soil and water resource. In addition to these specific measures, all applicable BMP's would be implemented as described in General Water Quality Best Management Practices (USDA, 1988a). The use of these approved BMP's is a key element in the Forest Service non-point source management strategy to ensure Clean Water Act compliance.

### **1. Soil Productivity and Water Quality**

- 1a. To minimize soil compaction and displacement during wet conditions, the use of ground-based yarding equipment or other equipment on and off of roads or landings would be restricted during periods when soils are excessively wet or saturated. This requirement is provisional depending on site conditions to be determined by the timber sale contract administrator or aquatic specialist.

Alternative 5: Units 8, 15, 19S, 20, 24, 26, 27, 28, 44

- 1b. Where feasible, trees will be felled away from streams or other riparian features to prevent damage to riparian vegetation and soils within Riparian Reserves.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 44

- 1c. To minimize erosion and potential sedimentation, one end suspension will be required for ground-based and cable yarding systems (except during winching or lateral yarding). This would reduce the likelihood of soil compaction and displacement (from dragging entire logs along the ground) which would intercept subsurface flows and channel overland flows.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1d. Full suspension yarding is required when yarding over a stream channel.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1e. To minimize the extent of areas subject to soil compaction and displacement, all equipment will be confined to approved temporary roads and skid trails during yarding and brush disposal operations. Where slopes are between 10-30% skid trails must be located at least 100 feet from any stream channel to allow sediment filtration. Where slopes are <10% skid trails must be located at least 50 feet from a stream channel. Winching would be employed in ground-based yarding units as well as felling trees to lead in all units regardless of yarding system. In areas of past harvest, temporary roads and skid trails would be reestablished on previous locations rather than constructing new ones. These trails and roads will be treated to restore hydrologic function as needed.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1f. All efforts should be made to avoid temporary or reconstructed roads within Riparian Reserves. Where temporary roads and stream crossings are proven beyond dispute as necessary, location, design and construction should be based on methods that minimize adverse impacts to water and

fisheries resources. Erosion control measures must be in place prior to the normal heavy rainfall period.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1g. No ground-disturbing machinery related to silvicultural activities is allowed in the first 1/3 of the Riparian Reserve closest to the stream channel.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1h. No skid roads are allowed in the first 1/3 of the Riparian Reserve closest to the stream channel.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1i. A no harvest buffer extending from the center of the stream channel to the topographical break on either side of the stream channel is required to ensure that the stream banks remain intact and stable

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1j. Sidecasting of loose material in riparian zones during construction or maintenance activities is prohibited.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1k. The following measures will minimize the routing of water and sediment to streams. Prior to any expected seasonal period of precipitation and runoff, and after sale activities are complete, cross drains and grade breaks will be installed in all temporary roads, skid trails, and landings. In addition, all culverts and fill will be removed from stream crossings. After sale activities are complete, impacted areas on landings, temporary roads and skid trails will be outsloped and sub-soiled to a depth of 20 inches, and the surface will be seeded with a Forest Service designated mix and fertilized. (An impacted area is generally where greater than 60 feet of continuous soil compaction or displacement, identified by 6-inch deep ruts, has occurred.) In special cases (i.e. stream crossings, contributing areas near streams, or other sensitive areas), mulch, erosion matting or re-contouring may be used as needed to prevent or reduce sedimentation. Where designated by the timber sale contract administrator, impacted areas of skyline yarding will be waterbarred, seeded and fertilized as above. The expectation of this mitigation measure is the maintenance of soil permeability and soil productivity and near elimination of increased channelization of surface flows in harvest units near streams from temporary roads and harvest related activities.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1l. All currently closed permanent roads used by the sale will be closed after sale activities have been completed. The roads will be left in a self-maintaining condition by placing a barrier at the junction with the existing road system, constructing cross-ditching on steep-gradient sections and at culverts or other drainage locations.

Alternative 5: Roads 2300135, 2300181, 2300202

- 1m. To reduce bank damage and the amount of sediment contributed to Doe Creek, all stream crossings would use logs. The banks of this stream would be reconstructed to maintain channel integrity. The district hydrologist will help design the crossing and reconstruction of the channel.

Alternative 5: Unit 26

- 1n. The following measures are prescribed to minimize the amount of sediment delivered to the Cispus River from the reconstruction of Road 2300202. Move any piles of disturbed soil to the side of the road opposite the river. In addition, place a sediment barrier (straw bales, slash filter windrow and/or sediment fence) between the river and road in areas where the ground is disturbed.

Alternative 5: After timber sale-related activities are completed, decommission the road, including subsoiling to eliminate compaction in areas where this will not increase the amount of sediment entering the river, and block at the junction with Road 23.

- 1o. All roads constructed during this sale will be temporary, and will be decommissioned under contract. The intent of decommissioning activities is to prevent sedimentation from roads and skid trails used during sale activities from reaching the Cispus River and its associated tributaries. Decommissioning activities can include removal of all sidecast materials and perched landing debris, culvert removal, outsliping, ripping the road bed, distributing native or non-invasive seed mix and mulching with weed-free straw, and/or planting trees and shrubs to increase soil stability. Of these activities, only those that best meet the intent of limiting sedimentation are needed.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1p. Most of the units have been harvested previously. As a result of this earlier harvest, old temporary roads and skid trails are affecting the routing of water and serving, either directly or indirectly, to increase stream flows and as sources of increased sedimentation. These skid trails and roads should be reused to the extent practicable, and should be restored to reduce sedimentation upon completion of harvest activities. KV funds should be prioritized to complete any additional restoration activities that can more completely restore these old roads to their natural state.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1q. In order to control and disperse water on the hill slope, waterbars or other structures would be installed on roads and skid trails with a grade of 4 percent or greater. Spacing and number of these cross drains should be consistent with Best Management Practices objectives.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1r. Locate tractor skid roads approximately 120 feet apart and skyline yarding roads approximately 150 feet apart which would meet the Regional standard of soil disturbance less than 15 percent of the area.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1s. Haul and road construction should not be authorized when soils are excessively wet.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 1t. The silvicultural treatment in the riparian reserve will follow a prescription to optimize structural development and plant species diversity to benefit water quality and old growth dependent fauna including native salmonids. The riparian silvicultural prescription will be broken into two riparian management zones including the following components:
- a. **Inner zone:** No harvest buffer will cover the first 1/3 of the riparian reserve. Class I and II stream riparian reserves are two site potential tree heights and Class III and IV streams are one site potential tree height measured horizontally from the ordinary high water mark on each side of the stream. Riparian vegetation is an important source of both stream shade and input of foliar debris providing favorable stream temperatures and source of food for aquatic organisms.
  - b. **Outer zone:** Selective thinning will be used in outer 2/3 of the riparian reserve with a relative density consistent with the upland thinning prescription.
    - i. Canopy closure of no less than 70 % percent will be retained by strategically placement of vegetative “skips and gaps”.
    - ii. Riparian plant diversity, density and vigor will be maintained by retaining all western red cedar (*Thuja plicata*), red alder (*Alnus rubra*) and bigleaf maple (*Acer macrophyllum*)
    - iii. Downed large woody debris should be evenly dispersed in the flood prone area in numbers consistent with the Late Seral Reserve standards and guidelines pieces per acre. Large wood will serve to moderate high flows and provide source of instream wood.
    - iv. Riparian reserve widths and surface roughness are adequate to prevent the delivery of anthropogenic sediments. Down wood is abundant, > 5 trees per acre (>75 feet long and in decay class I-III), and providing ample sediment trapping opportunities.
    - v. Trees, shrubs, grass, and forbs combined cover more than 90% of the ground. Openings in this nearly complete cover are small and evenly dispersed. A variety of species and age classes that represent the potential site community are present. Growth is vigorous and reproduction of species in both the under and overstory is proceeding at a rate to insure continued ground cover conditions. A deep, dense root mat is inferred.
    - vi. Falling and leaving trees where down wood is inadequate to provide sediment filtration (<5 trees/acre).
    - vii. Retain all trees measuring >20 inches in diameter at breast height (dbh).

## 2. Wildlife and Wildlife Habitat

- 2a. There are no currently valid spotted owl surveys conducted to protocol within the Smooth Juniper planning area. However, some surveys have been performed since 1996 to determine pair occupancy and/or the nesting status of several pairs. The surveys were performed as a response to requests to lift seasonal operating restrictions.

In the absence of valid surveys, a fragmentation analysis was used to predict the potential of spotted owls nesting in fragmented landscapes. The model was applied to the Smooth Juniper planning area and a limited operating period (LOP) placed on those units with the highest potential to support nesting pairs. To minimize disturbance to spotted owl pair(s) which may be nesting in this area, the following direction is provided. There will be NO restrictions for timber harvest and road construction as needed to access Units 7, 15, 20, 24, 26, 27, and 28. The remaining units would be

subject to either a March 1 to June 30 LOP for noise disturbance or a March 1 to August 31 for habitat removal. No timber harvest activity including felling, yarding, hauling, helicopter flights, or road construction would be permitted during the LOP. The LOP would remain in effect for the duration of the timber sale contract unless spotted owl surveys were conducted to Forest Service protocol and determine no nesting spotted owls were present in the immediate area.

Harvest units with a noise disturbance LOP of March 1 through and including June 30 include:

Alternative 5: Units 19S, 31, 44

Harvest units with a habitat removal LOP (timber felling only) of March 1 through and including August 31 include:

Alternative 5: Units 8 and 19S

- 2b. Planned harvest Units 8, 15, 19S, 20, 24, 26, 27, and 28 are within deer and elk biological winter range. To eliminate disturbance to wintering animals consistent with Forest Plan standards and guidelines, a limited operating period (LOP) prohibiting all timber harvest and road construction activities within these units will be in effect each winter from December 1 through and including March 31. An exception to the restriction will be made for harvest units along Forest Road 23 where timber operations during the closure may proceed within one unit at a time except for Units 27 and 28, which are also restricted for bald eagle protection (see below). This will prevent a lengthy contract period and reduce traffic disruptions from harvests conducted during the summer season. This measure would also benefit wintering bald eagles utilizing the Cispus River corridor.

Harvest units with a LOP of December 1 through and including March 31:

Alternative 5: Units 8, 15, 19S, 20, 24, 26, 27, 28

- 2c. Planned harvest Units 8, 24, and 26 surround a wet meadow complex that functions as calving and fawning grounds for deer and elk. Forest plan direction is to minimize disturbance and displacement of deer and elk in these areas. To mitigate this concern an LOP would be applied to these three units consistent with Forest Plan as amended standards and guidelines (p.2-74). The LOP would prohibit all timber felling, yarding, hauling, and road construction during the period of May 15 through and including June 30 each year. This restriction may be waived by a wildlife biologist based on a field review of the site just prior to the onset of the restriction, if the biologist determines that the area is not, or not likely to be, used by deer or elk that season. This measure would apply to the following units by alternative:

Alternative 5: Units 8, 24, 26

- 2d. To eliminate potential disturbance to wintering bald eagles along the Cispus River, no harvest will occur between Nov. 15 and March 31 in Units 27 and 28 in Alternative 5 per the Biological Opinion from the U.S. Fish and Wildlife Service for the sale.
- 2e. To provide snag habitat for cavity excavator populations, it has been proposed to leave green trees and snags in sufficient numbers to maintain cavity excavator populations at the 60 percent potential population level. This would require 6.5 green trees per acre left in addition to the 15 percent ROD retention standard in regeneration harvest units. Of the 6.5 green trees per acre, 3.4 would need to be converted to snags for the 60 percent potential population level.

Within the planned thinning units, average stand diameters range from 11 inches to 17 inches. Small diameter snags particularly those less than 17 inches diameter only provide short-term benefit to cavity excavators because the snags only stand for about 15 years. However, to provide some snag habitat capability in thinning units the following direction is provided. In those thinning units where 17 inch diameter trees are available without highgrading every large diameter tree, approximately 2.6 green trees per acre greater than 17 inches would be converted to a snag within 5 years after the completion of timber harvest.

In both regeneration and thinning harvest units, preference would be given to protecting existing snags wherever possible with no harvest clumps and retention of snags that do not pose a threat to forest workers. After the completion of timber harvest, a survey would be conducted to determine the level of snags left behind as well as those green trees that may have become damaged during the logging operation. These snags would be deducted from the estimated number of green trees needing conversion into snags to maintain the 60 percent potential population level.

Depending on the availability of funding from timber sale receipts, regeneration harvest units would be given first priority for snag creation. This mitigation measure would apply to the following units by alternative:

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31

- 2f. Snag levels should meet amount required for 100% habitat levels for cavity nesting birds. KV funds will be used to create snags if they are deficient three years after treatments. Snag creation should occur through girdling a large tree above living branches which will create a cavity tree and will generate coarse woody debris when the top falls off.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 2g. All snags 21 inches in diameter or greater which pose a safety hazard should be buffered and protected whenever possible. All remaining snags which pose no safety hazard should be retained whenever possible.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 2h. The Northwest Forest Plan and the Cispus Adaptive Management Area Plan in which Smooth Juniper planning area is located did not prescribe specific coarse woody debris levels to be left after logging operations. Consequently, it has been proposed that 480 linear feet of decay class 1 or 2 down logs per acre be left in all regeneration harvest units. Within the commercial thinning units, 240 linear feet of decay class 1 or 2 logs per acre would be left in each harvest unit. All logs should be greater than 20 feet in length.

Down logs already present on the forest floor should be retained and may count towards the prescribed levels if they have not decayed beyond class 2. Within the thinning units, 240 linear feet is probably not present and felling green trees would be required to fulfill this measure. The green trees selected for down logs should be of representative size for that stand. The purchaser would be required to fell and leave these trees as part of the timber sale contract. The intent of this measure is to provide sufficient levels of coarse debris for dependent species such as small mammals, amphibians, and mollusk species to meet the intent of the Forest Plan as amended standards and guidelines.

Trees left for down wood will come out of the take trees (not trees left following harvest).

The following units would require a minimum of 480 linear feet of class 1 or 2 logs per acre:

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 2i. Any remnant old growth trees surviving the Cispus Burn of 1918 will be designated as leave trees for forest stand structural diversity.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 2j. The purchaser would be required to permanently close all newly created temporary roads and any previously closed roads that are needed to provide access to Smooth Juniper timber sale units. The closures should be of native materials such as boulders and/or root wads of sufficient size and amount to effectively prevent all types of motorized traffic beyond the closure. Road closures would be implemented after the completion of all harvest activities. This measure would reduce potential disturbance to resident and migratory big game animals from vehicular traffic and would apply to all action alternatives.
- 2k. To maintain species diversity among the retention trees, minimize the marking and felling of minor tree species such as western red cedar, western white pine, big leaf maple, and cottonwood in ALL harvest units. Exceptions could occur where they dominate the stand and removal is needed to reduce stocking levels or facilitate harvest operations. This measure would apply to all action alternatives

Within the commercial thinning units adjacent to Road 23, do not cut or slash the western hemlock and western red cedar seedlings and saplings particularly within the first fifty feet of the road. This measure is intended to increase vegetative diversity and canopy layering as well as provide visual screening for deer and elk from vehicular traffic on Forest Road 23.

Alternative 5: Units 15, 19S, 20, 24, 26, 27, 28, 31

- 2l. Units 24 and 26 overlook a wet meadow complex utilized by resident and wintering herds of deer and elk. To maintain visual screening from Forest Road 23 and allow animals undisturbed use of the meadow, approximately two acres would be underplanted with shade-tolerant coniferous species. These seedlings would be planted in a strip at least 50 feet wide and parallel the meadow complex. This measure would apply to the following units:

Alternative 5: Units 24 and 26

- 2m. To protect known sites of survey and manage mollusk species (i.e. the terrestrial snail *Cryptomastix devia*), a one-acre (120-foot radius) buffer would be placed around each site within thinning units and 300-foot radius buffer around sites within regeneration harvest units. No road construction, timber felling, or yarding should occur within these protected zones.

Alternative 5: Units 8 and 19S

- 2n. A contract provision would be incorporated into the timber sale contract that would protect threatened and endangered species and/or critical habitat that may be discovered or designated after sale award and during project implementation. This measure would apply to all action alternatives.

- 2o. All hardwood trees will be left standing unless cutting is approved by the Timber Sale Administrator. Permitted cutting of hardwood trees includes, but is not limited to, corridor trees, road right of way, danger trees and hang ups.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

### **3. Recreation and Scenery**

- 3a. To minimize vegetative disturbance and slash concentrations along Road 23, landings, temporary roads, and skid trails should be located out of view of travelers along the road unless there is no reasonable alternative. When activities occur within 100 feet of the road, leave existing roadside vegetative screening (non-merchantable trees and brush) undisturbed as much as possible in order to conceal the activity area. Approximately one year after project completion evidence of harvest activities should not be apparent to the casual observer traveling along Forest Road 23, which will meet the Visual Quality Objective of Retention.

Alternative 5: Units 15, 19S, 20, 24, 26, 27, 28, 31

- 3b. Not Applicable to Alternative 5.

### **4. Timber and Other Vegetation**

- 4a. Genetic resource select trees would be protected from damage during and after logging operations because they would be the source of genetically superior seed until seed orchards come into production. Select trees located within or near harvest unit boundaries would require protective measure(s) consisting of the following: (a) select trees located near or within units would be shown on the sale area map; (b) select trees would not be used as guy trees or be impacted by guy lines; (c) directional felling would be employed in the vicinity of select trees; and (d) provisions must be made to protect them during slash disposal activities using firelines, handpiling, or choosing not to treat the slash.

Alternative 5: Units 15, 19S, 20, 24, 26, 27, 28

- 4b. To protect retention/residual trees during high sap-flow periods, operations in the units below would have timing restrictions. The objective is to reduce the amount of bole scarring/damage and resultant impacts from the loss of tree growth, wood quality, and mortality. Increased or high sap-flow in the spring and early summer lasts from approximately bud break through shoot elongation. The timing varies by site and elevation. Sap-flow timing restrictions apply to felling and yarding operations. Restrictions would be included in the timber sale contract and may be waived if the operator can positively demonstrate an ability to fell and yard without unacceptable damage to leave trees.

Restriction period March 1 through May 31:

Alternative 5: Units 8, 15, 19S, 20, 24, 26, 27, 28, 31

Restriction period April 1 through June 30:

Alternative 5: Units 7, 44

- 4c. To maintain soil productivity following harvest operations in all commercial thinning harvest units leave all tops and limbs where trees are felled. The objective is to provide future short-term



nitrogen needs to the soil. Exceptions may be made along well used roads and selected areas where slash disposal is needed to create fuel breaks.

Alternative 5: Units 7, 8, 15, 19S, 20, 24, 26, 27, 28, 31, 44

- 4d. The timber sale contract will require the purchaser to ensure that all equipment moved onto National Forest land is free of soil, seeds, vegetative matter, or other debris that could hold or contain seeds. For the purposes of this requirement, "equipment" is defined as all logging machinery except for log trucks, chip vans, pickup trucks, cars, or other vehicles used to daily transport personnel. This will help prevent the introduction and spread of new species of noxious weeds into the planning area.
- 4e. The three protection levels described below illustrate the degree of protection the following Sensitive Species mitigation measures are expected to contribute.
- **Low** - Occurrence(s) of species is protected from direct impacts of management activities, but is minimally protected from indirect impacts of edge effects.
  - **Moderate** - Occurrence(s) of species is protected from direct impacts of management activities, and is protected from indirect impacts except under extreme natural or human-caused events, such as windstorms, snowstorms, floods, landslides, etc., where an occurrence's exposure is heightened due to its proximity to the management activities.
  - **High** - Occurrence(s) of species is protected from direct and indirect impacts of management activities, such that management activities do not heighten the risk of such impacts occurring.

*Dendrocopula intricatum* - One occurrence was found in Smooth Juniper project area in Unit 28. Prescribed mitigation is a 125-foot buffer on all sides of the site. Due to the short distance to the road this may not be possible on the side bordered by Road 23. This mitigation should provide a moderate level of protection.

*Nephroma bellum* - One occurrence was found in Smooth Juniper project area in Unit 24. Because this is the only known occurrence of this species on the Forest, and to ensure its persistence in the local area and maintain microsite conditions, a 125-foot buffer will be required for this occurrence. This mitigation should provide a moderate level of protection.

*Peltigera pacifica* - Sixteen occurrences were found in Smooth Juniper project area in Units 15 and 20. To protect occurrences and habitat for *P. pacifica*, *Tetraphis geniculata*, and *Ramaria cyaneigranosa*, drop from the sale those portions of Units 15 and 20 west of Forest Road 2300181 in Alternative 5. This area contains prime habitat for these species. With regard to *P. pacifica*, some, but not all, occurrences on the hillslope east of Forest Road 2300181 in Units 15 and 20 would also be selected by the District Botanist for protection with individual 75-foot buffers.

*Platismatia lacunosa* - Two occurrences were found in Smooth Juniper project area in Unit 15. Because this species has so few occurrences on the Forest, and to ensure that microsite conditions will be maintained at this location, a buffer of 125 feet in radius is prescribed. This mitigation should provide a moderate level of protection.

*Ramaria cyaneigranosa* - One occurrence was found in Smooth Juniper project area in Unit 15. The single occurrence of *R. cyaneigranosa* would be protected in the portions of Units 15 and 20 dropped from the sale west of Forest Road 2300181 in Alternative 5.

***Tetraphis geniculata*** - Thirteen occurrences were found in Smooth Juniper project area in Units 15, 20, 24, 26, and 27. Mitigation includes dropping the portions of Units 15 and 20 west of Forest Road 2300181 for Alternative 5. This would protect and maintain prime habitat and several known occurrences in the project area. Other individual occurrences in Units 20, 24, 26, and 27 would be selected by the District Botanist for protection with a 75-foot radius buffer. This mitigation should provide a moderate level of protection. Logging operations should attempt to avoid or minimize impacts to large logs in the area to maintain this habitat for recolonization by *Tetraphis geniculata*.

- 4f. Prevention and control activities should be implemented before, during and after project activities in order to reduce the risk of introducing and spreading weeds in the project area.

To prevent the introduction of noxious weeds into the project area, all heavy equipment, or other off- road equipment used in the project is to be cleaned to remove soil, seeds, vegetative matter or other debris that could contain seeds. Cleaning shall be done before entering National Forest Lands, and when equipment moves from project sites or areas known to be infested into other areas, infested or otherwise. An inspection will be required to ensure that equipment is clean before work can begin. This is the responsibility of the COR.

In order to prevent the spread of weeds that currently exist on Forest Roads into newly disturbed sale activity areas Class B and C noxious weeds are to be removed through hand pulling and/or weed wrenching (or other appropriate means) along roadsides adjacent to harvest units, and extending 200 feet along the road beyond the unit boundary. This is to occur prior to project activities. Also, scotchbroom (*Cytisus scoparius*) along Forest Road 2324 near its junction with Forest Road 23 will require the same treatment if Unit 34 is included in the selected Alternative. These treatments should occur during the season of project commencement, but before the project begins.

KV funds should be sought to revisit weedy sites in the sale area to control ensuing infestations.

Temporary roads, landings and other areas of heavy disturbance shall be revegetated with a native seed mix and application prescription developed by the Forest. Guidelines for site preparation shall also be followed (see Gifford Pinchot Native Species Policy, 2000). This information will be provided by the District Botanist prior to project implementation.

## **5. Slash Disposal**

- 5a. Slash burning will take place only when State Smoke Management advisories are favorable. Burns that will consume 100 tons or more of material will not be allowed on weekends (midnight Thursday through midnight Sunday) between June 15 and October 1, or on Independence Day or Labor Day Holidays.
- 5b. To reduce the fire hazard, slash associated with this sale will be disposed of as needed after considering opportunities for utilization as fuelwood or fiber sales. See descriptions for individual units by alternative and alternative summary tables for more details about slash disposal.