

Rainbow Best Management Practices (BMPs) Review Design Features (8 selected)

Invasive Weeds

IW-3

Practices - Retain native vegetation to the extent possible to prevent weed germination and establishment, in and around activity area and keep soil disturbance to a minimum. (3)

A – Contracts will require timber purchasers and contractors will re-seed disturbed areas (as designated by the Forest Service) with an appropriate certified weed-free native seed mix to avoid introduction of nonnative invasive plants and promote re-vegetation of native species.

B - Throughout the implementation period of the proposed action, the Forest Service should maintain flexibility to defer cut units or stands within priority areas from treatment due to the discovery of significant new invasive plant populations with potential to disrupt the functioning of native plant communities.

C - Where fuel reduction, timber harvest and other resource objectives necessitate ground disturbance and soil exposure, or substantial ground cover and canopy removal, include appropriate re-vegetation or invasive plant management strategies in treatment plan. (4) Where necessary, rehabilitate/restore or treat disturbed areas after management activities and conduct follow up monitoring on these areas susceptible to invasive plant spread. (4)

D – In areas of high risk for invasive weeds spread, rehabilitate/restore, or treat disturbed areas after fuel management activities and conduct follow up monitoring to minimize invasive plant spread. (4)

E- Cover and reduce exposure of bare ground. Use on-site chipping or treated fuels from mastication to cover bare soil to prevent seed establishment where appropriate. (4) See SV-4 concerning areas where mineral soil exposure would be needed to assist with natural regeneration.

F-Slash and burn piles will be located away from known invasive weed populations and will be assessed for restoration and revegetation needs.

Silviculture

SV-6

During any types of harvest in spruce-fir, areas of advanced regeneration will be avoided to the greatest degree practicable while allowing feasible operations.

Fuels/Slash Piles

SP-4

To facilitate complete burning, piles shall be compact in size and shape, and free of soil. Piles will not be less than 12 (twelve) feet in height. Piles shall not be constructed as windrows, rather the size of each pile's footprint shall be minimized. The size of each pile's footprint shall not exceed 50 feet in any dimension. Piles shall be of a size and location which will not impair road use or result in damage to residual timber. Piles shall be located at least 50 feet from residual timber.

Water & Soil

WQSP-1A

A.Maintain the organic ground cover of each activity area so that pedestals, rills, and surface runoff from the activity area are not increased. The amount of organic ground cover needed will vary by different ecological types and should be commensurate with the potential of the site.

WQSP-7B

A. Skid trail locations will be agreed to by the Forest Service in advance of construction; spacing will be approximately 100 feet apart, allowing for topographic variation and skid trail convergence. Space water bars as appropriate on skid trails according to slope and soil type as indicated below: **Unified Soil Classification - ASTM D 2487**

Slope (%)	ML, SM Extremely Erodible Silts & sands with little or no binder (i.e. decomposed granite)	MH, SC, CL Highly Erodible Silts & sands with moderate binder	SW, SP, GM, GC Moderately Erodible Gravels + fines & sands with little or no fines	GW, GP Slightly Erodible Gravels with little or no fines
1-3	200	300	400	500
4-6	125	200	300	400
7-9	100	150	200	250
10-12	70	100	150	200
13-25	50	50	75	100
25+	30-50	30-50	60-75	80-100

B.Space cross drains and rolling dips as appropriate on temporary roads according to road grade and soil type as described in FSH 2509.25 table 13.3 – Exhibit 01, Maximum Cross-Drain Spacing in Feet based on Soil Types. **Unified Soil Classification - ASTM D 2487₁**

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1-3	600	1000	1000	1000
4-6	300	540	680	1000
7-9	200	360	450	670
10-12	150	270	340	510
13-25	120	220	270	410

Wildlife Fish and Rare Plants

WFRP-2

At a minimum, in spruce-fir forest types maintain 90 to 225 snags per 100 acres, 10 inches in diameter at breast height (dbh) or greater (where biologically feasible). In aspen forest types, maintain 120 – 180 snags per 100 acres, 8 inches dbh or greater (where biologically feasible). Snags would be maintained away from structures, roads and trails so that they do not create safety hazards to the public. Where possible, utilize natural sinuosity or drainages for linking groups. Protect standing wildlife trees from damage during site preparation and post-sale activities.

WFRP-4

Maintain large diameter downed logs in various stages of decomposition within harvest units (50 linear feet/acre of 10 inches diameter or larger at the large end of lodgepole pine and aspen logs and/or 12 inches diameter or larger for Engelmann spruce, subalpine fir and Douglas fir logs).

WFRP-12

Areas supporting live advanced regeneration with >35% Dense Horizontal Cover in blocks greater than 0.3 acres will be avoided to the extent possible during layout [and during harvest operations], while allowing feasible operations