

Blue Lake Fire Suppression Repair Standards

METHOW VALLEY RANGER DISTRICT
OKANOGAN-WENATCHEE NATIONAL FOREST

8/31/2023

Objectives

The intent of the Suppression Repair Plan is to mitigate adverse effects to resources resulting from fire suppression activities (FSM 2523.1) on the Blue Lake Fire. Visual quality along high use trails, public and firefighter safety, maintaining hydrologic functions, and erosion control are the focus of this work. Steep slopes, shrubs and forbs, heavy loading of large down woody debris, and trees with shallow roots characterize most of the burned area. Completion of this repair work is critical to reducing the impacts of inadequate drainage features and/or restrict future recreational use to disturbed areas.

Handline

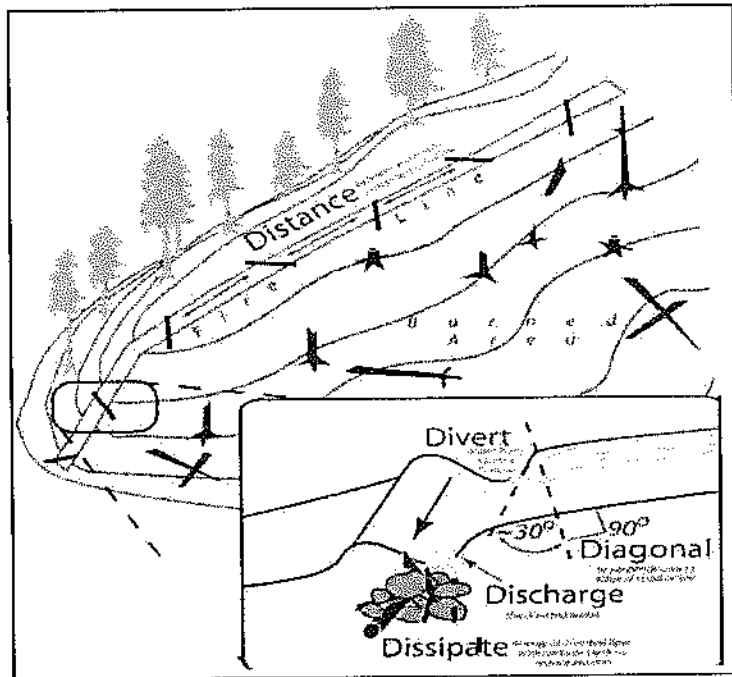
- Fire lines that are within high probability areas will need to be surveyed by a Cultural Resource Technician prior to implementation of suppression repair. READ will notify Team when this condition exists.
- Hand crews will be used to implement water bars. No equipment will be used to install water bars.
 - Height of hand constructed water bars should average 12 inches. Use natural dips and rolls where possible.
- Place water bars on hand lines with the following general spacing guidelines, modify as needed to minimize soil erosion.

Percent (%) slope	Spacing between water bars
<15%	150 ft
15% - 30%	75 ft
30% - 45%	50 ft
>45%	25 ft

- Construct water bars at a 30° to 45° angle from the fire line, directing water away from the fire or other parts of the fire line. When feasible, alternate directions of outlet.
- Pull berms, fill in trenching, and blend disturbed areas to fit the natural contours.
- Pull debris removed from the fire line back onto the fire line. Scatter branches, wood, rock, sod, or other material to naturalize the fire line and prevent soil erosion. Strive for 65% to 85% ground cover. In grassy areas, replace soil and sod and scatter rocks to naturalize the line location.
- Block road access to hand lines to discourage recreational use, i.e. attempt to visually obscure junction of line and road and make travel on first section very inconvenient.

Water bars: the 5 Ds: "When locating and building water bars for all hand-line and heavy equipment line, place them the right **Distance** apart, at a **Diagonal** to the fire line, so that they **Divert**, then **Discharge**, then **Dissipate** the energy of the flowing water. Be sure to make them deep enough so that they will be durable".

**See diagram*



Roads

- Only applicable to roads impacted **during incident suppression**.
- Clean culverts inlets/outlets with hand crews as needed to maintain hydrologic function and avoid road washouts
 - Remove bucked rounds placed in creeks and ditches that could impact culvert function during high flows and snowmelt.

General

- Chip or disperse large concentrations of unburned fuels created during suppression efforts, or pile as requested by the unit (see "Incident Specific Items" section).
- Remove all supplies, equipment, and trash (including cigarette butts) from control lines, roads, drop points, and staging areas that are not needed for contingency. Dispose off-site.
- Remove all shelter wrap and staples.
- Signs/flagging removal: All signs and flagging will be removed from fire lines, roads, drop points, staging areas, camps, and water chances. Leave only flagging in place which marks hazards, resource concerns, etc.
- All water drafting sites (streams and lakes): return area to pre-fire condition (remove dams created for pumps, etc.)
- All drainages (intermittent and perennial), meadows, and springs: remove all soil, slash, and other debris that has been pushed into these areas. Streams should match natural upstream and downstream conditions.
- Avoid unnecessary felling. When possible, avoid cutting trees and snags >25" dbh. Do not cut or damage any green **non-hazardous trees** anywhere within the fire area unless the tree has been specifically marked for felling by the repair team.
- All suppression features will be GPS'd and GIS files given to the home unit.

- Identify and inventory fences, signs, and other improvements damaged by the incident.

Incident Specific Items

- Slash created during fire line prep will have a mixture of piling and scattering of material. Special considerations include the viewshed of the PCT.
 - Bucked rounds which are too large to fully consume during pile burning should be scattered, preferably at a minimum of 10 feet away from any trail and in a randomized way. Do not place any rounds in or within 10 feet of an overstory tree or a stream.
 - All other slash created during incident suppression should be piled. Piles should be located at least 10 feet from any trail and **no piles shall be located on the trail itself**. Piles should be at least 10 feet away from the dripline of overstory trees and 10 feet or more from streams, should be 4.5-6 feet tall by 6-7 feet wide, and built with a sufficient fine fuel core for successful ignition. When feasible, do not create piles on top of downed logs, as to avoid fire spread from pile.
 - Collect spatial data points for each pile (needed for the pile burn plan).
 - If residual slash is less than the necessary amount to create at least one pile of the desired size, the material may be scattered. Material should be placed at least 10 feet from the dripline of overstory trees.

Agency Administrator Approval

- Final approval for completion of Fire Suppression Repair Standards for the Blue Lake Fire on Okanogan-Wenatchee National Forest lands will be the Agency Administrator for the USFS.
- All completed Fire Suppression Repair work will be documented including progressive reporting to the Lead Resource Advisor of completed work, GIS mapping of completed work, and may include photographs of special projects. A final report/map product documenting **all completed and remaining** work at time of closeout will be provided to the Agency Administrators.

Blue Lake Fire Incident Commander

Date

Agency Administrator
Okanogan-Wenatchee National Forest

Date

Chris Furr
Methow Valley District Ranger
Okanogan-Wenatchee National Forest

Date

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