COLVILLE NATIONAL FOREST
BURNED AREA EMERGENCY RESPONSE [BAER] PLAN

NORTHSTAR
RECREATION RESOURCE ASSESSMENT

I. OBJECTIVES

•Assess effects of the fire to health and safety of recreationists.

•Evaluate recreation facilities for potential damage as a result of changed watershed conditions and fire damaged vegetation.

•Evaluate threat to critical resources from potential erosion from trails.

•Prescribe emergency stabilization measures and/or monitoring.

II. ISSUES

•The Colville National Forest lands within and adjacent to the Northstar Fire are very important to the local community, as one of the few areas in the county that has developed recreation opportunities.

•Swan Lake Campground experienced fire that burned ground cover and torched isolated single trees. An increase of hazard trees in the campground is expected, as residual tree mortality occurs.

•Six trails were partially or entirely within the burned area including Swan Lake, Swan Butte, Huckleberry, Fish Lake, Long Lake, and Ten Mile trails. There will be a high risk to trail users from falling snags for several years.

•Most of the area within the Northstar Fire on the Colville National Forest is very popular for hunting; primarily for big game and upland birds.

III. OBSERVATIONS

Background

Developed campgrounds, trailheads and trails occur within the burned area. The most heavily used campground on the Republic Ranger District, Swan Lake Campground, experienced low intensity fire and pockets of moderate fire intensity.

Several trails in the area provide access around the small lakes and are very popular with hikers and fishers. A section of the Pacific Northwest National Scenic Trail is also within the fire perimeter and uses existing trails, roads, and cross country routes to traverse the area. Primary form of trail use in this area is by hikers and bicyclists. An unofficial network of roads (open and closed) is used by bicyclists.

Northeast Washington is very popular for big game hunting and this area of the Colville National Forest attracts many hunters. Fishing from both the shore and non-motorized boats at the small lakes is also a popular recreational pursuit.

Several of the roads within the fire perimeter are used in the winter as a groomed snowmobile system.

IV. FINDINGS

Reconnaissance Methodology and Results

Field assessments of the recreation site and trails were conducted on September 20-21, 2015. After completing the field assessment, reconnaissance was made by reviewing post-fire burn intensity maps and severity maps. The purpose of the reconnaissance was to determine and assess potential negative effects on recreation sites and trails attributable to the wildfire.

Trails

Trails within the Northstar Fire experienced moderate to high burn severity conditions. Trails have damaged tread where roots and stump holes burned and collapsed the walking surface. Many fallen fire-killed trees and much debris that has rolled into the tread have impeded trail access, especially in the high severity burned areas.

Danger from falling snags will be high and will persist for many years. There will also be increased risk to hikers from debris flows in cases of large precipitation events on trails.

Closing these trails to the public is not desirable due to their popularity, difficulty in enforcement because of the multiple means of ingress, and lack of alternative similar opportunities in the trail areas.

Swan Lake Campground

Swan Lake Campground experienced mostly low intensity ground fire with isolated single tree torching, resulting in increased number of hazard trees that have potential targets within the campground. However, active fire was observed during field assessments, but it is assumed that observed small pockets of fire were

contained and stayed at the relatively low intensity level. There are several burned stump holes and staubs remaining on the ground within the boundary of the camping area, which will pose a hazard to berry pickers. Wooden structures (wooden fences for preventing unwanted access) within the campground will need to be re-evaluated for safety and effectiveness.

At least one road sign was burned and fell over, and will need to be replaced to direct traffic in order to prevent vehicle collisions.

Closing this site to the public is not desirable due to its popularity, difficulty in enforcement, and lack of alternative similar opportunities in the area. There are at least three known avenues of ingress that would need to be gated in order to effectively close the site in order to protect the public.

IV. EMERGENCY STABILIZATION RECOMMENDATIONS

- **Trail, Road, and Dispersed Recreation Hazard Warning Signs**

Description: Purchase and install signs at all developed recreation sites, dispersed recreation sites with known history of use, on all roads accessing the burned area, and all trails that access the burned area warning of increased hazard due to post fire conditions including falling snags, rolling debris, and flooding.
Monitoring: Regularly visit roads and trailheads to ensure signs are posted. Replace signs when necessary.

- **Clean Existing Trail Drainage Structures**

Description: Clean existing trail drainage structures on 6 miles of trails that are within High and Moderate burn severity areas to ensure optimum functionality.
Monitoring: Inspect trails after major precipitation events and after spring runoff to assess effectiveness of erosion control structures at diverting water from trail surface.

- **Trail Erosion Control Facility Installation**

Description: Install drainage structures along portions of trails to protect water quality and minimize damage to trails. Work must be performed prior to snowfall in order to be functional for spring melt or a seasonal rain-on-snow event that could prove catastrophic.
Monitoring: Inspect trails after major precipitation events and after spring runoff to assess effectiveness of erosion control structures at diverting water from trail surface.

- **Campgrounds/Designated Dispersed Sites**

Description: Remove hazard trees that pose a threat to the safety of visitors or property. Close individual camp sites for 1-3 years in Swan Lake Campground (up to 6 sites potentially) until hazard trees can be removed.

Install closure devices to ensure individual sites are adequately protected. Purchase and install signs to inform public of closure(s) and hazards present. It is estimated that the cost of removing isolated hazard trees will be less costly than installing closure devices, signing, and monitoring for compliance.
Monitoring: Regularly inspect burned area around campground to assess for hazard trees. Visit sites regularly that have been closed to ensure public compliance, and closure devises and signs are present.

V. LONG TERM STABILIZATION RECOMMENDATIONS

- **Trail Reroutes**

Description: Construct 2 trail reroutes of up to ¾ miles in length on the Swan Lake and Swan Butte trails to achieve lower grade and better drainage. Decommission abandoned trail sections to ensure they continue to provide proper drainage and will no longer be used as travel ways.
Monitoring: Inspect after spring snowmelt and after summer use season to assess proper drainage.

VI. CONSULTATIONS

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VII. REFERENCES

Forest Service Handbook 2309.18

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