# PINE CREEK and SUMMIT FIRES 

# TUESDAY, J ULY 23 @1800 HRS <br> J ULY 24-26, 2013 

DAY: 0630-2030<br>PINE CREEK FIRE<br>PNHQO1<br>(1502)<br>ID-SWS-000471<br>SUMMIT FIRE<br>PNHQ4Y<br>(1502)<br>ID-SWS-000486

GPS: NAD 83 - FORMAT: DD MM. MM



7. Control Operations

CONTINUE TO MOPUP WHERE SAFE TO DO SO, CONSTANTLY ASSESS RISK.
CONTINUE REHAB WORK AND TRACK PROGRESS.
PULL REMAINING HOSE PUMPS, ETC, AS DIRECTED TO DO SO.
8. Special Instructions

PAY ATTENTION AND REACT TO CHANGING WEATHER AND FIRE BEHAVIOR CONDITIONS.
ALL SHIFT TICKETS NEED TO BE BROUGHT TO FINANCE EACH EVENING.
SHOWER HOURS ARE 2030-2230 HRS AT THE HIGH SCHOOL IN IDAHO CITY.
ALL SUPPORT PERSONNEL/EQUIPMENT/SUPPLIES WILL BE CHARGED TO THE SUMMIT FIRE (PNHQ4Y) STARTING WEDNESDAY, JULY 24, 2013.

| 9. |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Function | Frequency - RX | Frequency - TX | Tone | System | Channel | System | Channel |
| Command | 168.7000 | 170.9750 | Tx 110.9 | NIFC | 8 |  |  |
| Tactical Div/Group | 168.2500 | 168.2500 | RxTx 110.9 | NIFC | 1 |  |  |
| Logistics |  |  |  |  |  |  |  |
| Air to Ground | 166.6750 | 166.6750 |  | NIFC | 5 |  |  |
| Prepared by (Resource Unit Leader) |  |  |  |  |  |  |  |




## Helicopter Missions

Type 2 Helicopters-Missions as requested
Type 3 Helicopters-Missions as requested.

## TFR Information

Pine Creek Fire: FDC 3/4962 4345 50N 11556 57W 5 nautical mile radius surface to 9,000 feet MSL Frequency 124.225

NOTAM 07/113 Idaho City Airport Closure
Summit Fire: FDC $3 / 6461435911 \mathrm{~N} 11542$ 48W 5 nautical mile radius surface to 10,000 feet MSL Frequency 127.425

## Dipsite Information

| Name | Latitude | Longitude | DIV Location | Elevation |
| :--- | :--- | :--- | :--- | :--- |
| Pine Creek Fire |  |  |  |  |
| West Grimes Creek | 4345.145 | 11558.583 | Div Z | 3600 MSL |
| Highway 21 dip | 4346.888 | 11553.750 |  | 3500 |
| Moore Dip | 4346.536 | 11554.187 |  |  |

## Helispot/Medivac Site Information

| Name | Latitude | Longitude | Elevation | IGE/OGE |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Pine Creek Fire |  |  |  |  |  |
| Idaho City Helibase | 4349.392 | 11550.776 | 3900 | IGE | T1 |
| St Al's Medivac | 4345.287 | 11558.824 | 3520 | OGE | T2 |
| A/B 1 Medivac | 4346.850 | 11556.469 | 5320 | OGE | T2 |
| AirMed Ballfield LZ | 4349.477 | 11549.330 | 4000 |  | T2 |
| Summit Fire |  |  |  |  |  |
| M-1 |  |  |  |  |  |
| M-28 | 4359.318 | 11543.288 | 7500 | OGE | T3 |
| Summit Spike | 4358.910 | 11543.610 | 7900 | OGE | T2 |
|  | 4358.720 | 11544.000 | 7800 | OGE | T2 |

The upper ridge that has been over the region the last several days will push into Utah Wednesday. This allows mid and high level moisture to spread across the area Wednesday through Friday bringing isolated thunderstorms to the fire area. The airmass at the surface remains very dry...so little in the way of wetting rains are expected. Prior to the moisture moving into the area...high Haines indicies are expected Tuesday night and Wednesday. Therefore a Fire Weather Watch has been posted for that time period. Any question regarding the weather, please call the NWS Boise fire desk at (208) 334-9060.

## Tuesday night:

WEATHER:
TEMPERATURES:
HUMIDITY:
Clear.

WIND (Eye Level): Down drainage 2 to 4 mph by 2000 hours.
Ridges: Northwest around 5 mph .
Haines Index: 6 (High).
Wednesday:
WEATHER:
TEMPERATURES: 80 to 85 ridges and lower to mid 90 s lower valleys.
HUMIDITY: Minimum RH 10 to $15 \%$.
WIND (Eye Level): Upslope 1 to 3 mph in the morning becoming upvalley 4 to 6 mph
by the early afternoon.
Ridgeline winds Northwest around 5 to 8 mph . Afternoon gusts to 15 mph .

Chance of Wetting Rain: 0\%
Lightning Activity Level: 1.
Haines Index: 6 (High).
Thursday and Friday:
WEATHER: Partly cloudy with isolated mainly dry thunderstorms.
TEMPERATURES: 80 to 85 ridges and lower to mid 90 s lower valleys. Min temp 50 to 60.
HUMIDITY: Minimum RH 10 to 15\%. Max RH 30 to $50 \%$.
WIND (Eye Level): Upslope 1 to 3 mph in the morning becoming upvalley 4 to 6 mph
by the early afternoon.
Ridgeline winds West around 5 to 8 mph . Afternoon gusts to 15 mph .

Chance of Wetting Rain: 0\% LAL 2 Haines Index: 6 (High)

FORECAST NO: 5<br>PREDICTION FOR: Day SHIFT<br>SHIFT DATES: Wednesday July 24 through Friday July 26, 2013<br>\section*{TIME AND DATE}<br>FORECAST ISSUED: 1730 07-22-2013

NAME OF FIRE: Summit Fire
UNIT: ID-SWS; Boise National Forest
SIGNED: Cyndi Sidles, LTAN

## ...FIRE WEATHER WATCH IN EFFECT FROM TUESDAY EVENING 1800 MDT TO

 WEDNESDAY AFTERNOON 1800 MDT FOR HIGH HAINES ON THE BOISE AND WESTERN SAWTOOTH FORESTS...
## WEATHER DISCUSSION:

Warm Wednesday with Haines 6. A surge of high based moisture will begin moving into the fire area Wednesday night and into Thursday. No fire weather watch has been issued yet for the fire area for lightning Wednesday night into Thursday, but there is a potential for that to occur, please keep abreast of the weather daily as this is a dynamic system and the models are not in complete agreement on amount and timing of lightning. There will be little moisture with these storms as the moisture is high based and the atmosphere is dry. Thunderstorm activity will diminish through the weekend. The extended outlook for next week is for cooler and dry with breezy southwest flow.

## Wednesday, July 24

| WEATHER: | Mostly sunny. A slight chance of thunderstorms in the afternoon. Thunderstorms may produce gusty winds in the afternoon. |
| :---: | :---: |
| TEMPERATURES: | 75 to 77 |
| HUMIDITY: | 16 to 18 percent |
| WINDS: | SLOPE/VALLEY: northwest 8-11 mph with gusts to 20 mph |
|  | RIDGETOP: northwest winds to 10 mph with gusts to 18 mph , stronger near thunderstorms. |
| HAINES INDEX: | 6 HIGH LAL: 3 CWR: 0 |
| Wednesday night: | A 20\% chance of showers and thunderstorms Wednesday night. Temps 61 to 63, RH 29-34\%, winds light northwest, Haines 5, LAL 3 to 4 |

## Thursday, July 25

WEATHER: Partly cloudy. A 20\% chance of showers and thunderstorms.
TEMPERATURES:
HUMIDITY:
WINDS:
72 to 75
19 to 23 percent
SLOPE/VALLEY: light upslope winds less than 8 mph .
RIDGETOP: northwest winds to 10 mph , stronger near thunderstorms.
HAINES INDEX: 5 LAL: 3 CWR: unk.
Thursday night: partly cloudy. A 20\% chance of showers and thunderstorms. Temps 61 to 63, RH $35-38 \%$, winds light north

## Friday, July 26

WEATHER: Partly cloudy. A 20\% chance of showers and thunderstorms.
TEMPERATURES: 72 to 74
HUMIDITY: 19 to 21 percent
WINDS: SLOPE/VALLEY: light upslope winds less than 8 mph .
RIDGETOP: northwest winds to 10 mph , stronger near thunderstorms.
HAINES INDEX: 5 LAL: 3 CWR: unk.
Friday night: partly cloudy. A $20 \%$ chance of showers and thunderstorms. Temps 59 to 61, RH $36-39 \%$, winds light north

## EXTENDED FORECAST: Friday - Sunday

Saturday...mostly clear. A 20 percent chance of showers and thunderstorms. Temps 57 to 72.
Sunday...mostly clear. A 20 percent chance of showers and thunderstorms. Temps 57 to 72.
Monday...mostly clear. A 20 percent chance of showers and thunderstorms.

| FORECAST NUMBER: $\mathbf{8}$ | TYPE OF FIRE: Wildfire |
| :--- | :--- |
| FIRE NAME: Pine Creek | OPERATIONAL PERIOD: July 24-26, 2013 |
| DATE ISSUED: July 22, 2013 | TIME ISSUED: 20:30 |
| UNIT: Idaho Department of Lands, SWS <br> Boise National Forest, Idaho City R.D. | SIGNED: Doel Gossuidler <br> Joel Gosswiller, FBAN |
| INPUTS |  |
| WEATHER SUMMARY: See Attached Fire Weather Forecast. <br> FUELS: The fire is primarily burning in open ponderosa pine (Fuel Model 9) with a brush and timber litter <br> understory in drainages and on north and east aspects with needlecast, grass, and light brush on the south and <br> west aspects. There are pockets of Douglas fir on higher elevations on north aspects. <br> There are several brush fields on all aspects near ridgeline. Dead fuel moistures are tracking near record lows <br> for this time of year and large diameter fuels are burning down to ash. |  |

Current Fuel Moistures (Idaho City) 7/18:
Dead Fuel Moistures: 1000 hour- 10\%, 100 hour- 7\% 10 hour- 6\%
Live Fuel Moistures: Ceanothus (brush)- 115\%, Douglas fir- 105\% HIGH FIRE DANGER
Current ERC (Town Creek RAWS)-70 HIGH FIRE DANGER

## OUTPUTS

FIRE BEHAVIOR

## GENERAL:

Interior islands continue to burn out. Fire behavior is primarily creeping and smoldering in the duff and heavy fuels in the morning, then becoming moderate intensity surface fire with single tree torching as fire spreads into heavier concentrations of unburned fuel during the peak of the burning period (1300-1900). Some potential for re-burn exists in preheated brush and timber in the interior on Division B.

WATCH FOR OUTFLOW WINDS UP TO 50 MPH FROM THUNDERSTORMS THE ENTIRE TIME PERIOD. INTERIOR POCKETS COULD REBURN AND THREATEN THE LINE IN DIVISION B

Watch for rollout on steep slopes where spots can establish quickly and burn back upslope/up drainage.

## SPECIFIC:

Monitor interior islands for any torching through the burn period to ensure no spot fires ignite outside of control lines. The biggest threat from spotting remains torching trees in unburned islands closest to the control line in Division $B$ and potential for rollout in Divisions $Z$ and $Y$.

ANY SPOT FIRES OUTSIDE THE FIRE PERIMETER HAVE THE POTENTIAL FOR RAPID GROWTH!

AIR OPERATIONS:
Morning inversions may limit visibility in the Grimes Creek drainage. Watch for gusty winds up to 50 mph from thunderstorms through the entire time period!

SAFETY
All local fire behavior "watchout" thresholds are currently met!
Temperature >80
Relative Humidity<25
20 foot winds $>5$
ERC>69

TYPE OF FIRE: Wildfire
OPERATIONAL PERIOD: 24-26 July 2013
TIME ISSUED: 2000
SIGNED: Chris Church - FBAN

## INPUTS

## WEATHER DISCUSSION...FIRE WEATHER WATCH for high Haines Boise National

Forest Zone 421 Wednesday thru 6pm!ll...
Wednesday through Sunday...upper level ridge axis remains Just east of the area into the weekend which will aliow monsoonal moisture into area for a slight chance of afternoon thunderstorms. The primary mechanism for thunderstorms will be weak short waves as the area remalns capped in the mid level and thus thunderstorm coverage should be limited. Saturday and Sunday the ridge axis shifts east of the rockies as an upper level trough deepens southward from B.C. which will start a cooling trend. This will also keep a slight chance of thunderstorms in the mountains through Sunday. As the trough deepens dry air will be ushered in from the west and the monsoonal moisture will be pushed south of our area...thus precipitation chances will be minimal.

FUELS: Fuels are a grass, litter, and brush understory with annual grasses; sagebrush, and a timber over story element of mixed conlfer (subalpine fir, lodgepole pine, and scattered Douglas fir) on most aspects and elevations. Green grass has not yet carried the fire, but may carry fire during the peak part of the burn period with wind over 20mph. Most recent live fuel moistures taken by local Fuels Specialists on July $15^{\text {th }}$ are at $125 \%$ in brush, and averaged at $115 \%$ in timber. Latest ERC data shows the ERC has bumped above the historical average for the last 13 years at 72, and should surpass the 80th percentile mark over the next week or so. The ERC is also approaching the 2012 ERC for this date and time period.

## OUTPUTS

FIRE BEHAVIOR
GENERAL:
High temperatures will be in the mid 70 s over the next 3 days, with relative humidities averaging from 18 to $23 \%$ for the daytime lows. Expect low to moderate fire behavior over the next 3 days with possible single tree torching in the heavier timber, fueled by wind increases from thunderstorms in the fire area. With the continued high probability of ignition, be heads up to possible spotting distances of up to .2 tenths of a mile.

| Fuel Model | ROS (ch/hr) |  | Flame Length (ft) |  | PIG | Spot_Dist |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Head | Backing | Head | Backing |  |  |
| FM10 Timber | 7 | 4 | 5 | 4 | $96 \%$ | .2 mile |
|  |  |  |  |  |  |  |

Fire behavior predictions are for the hottest, drlest and windiest part of the burn period.

## SPECIFIC:

Expect creeping and smoldering fire early, progressing Into single tree torching as we move into the peak hours of the burn perlod, especlally if T-Cell winds are in the fire vicinity, There is intermixed grass within the fire area, that fire has not yet burned thru. Expect this to slowly change, as the grasses continue to dry over the next couple of weeks. Keep your essay up and have a plan should you get a spot fire in fuels on the steeper slopes with the PIG at $96 \%$ !!! If ridgetop slopes are impacted by gusty winds, expect spotting distances to be sllghtly increased.

AIR OPERATIONS:
With the forecasted Haines of 6 (High) on Wednesday and afternoon wind gusts of $10-20 \mathrm{mph}$, air operations should be good early but slightly bumpy over lee sides of ridges Wed, afternoon, especially around any thunderstorm development areas. Haines is 5 (Moderate) for Thur-Fri, with lighter winds forecasted............

## SAFETY

With gusty winds associated with thundercell developments, be especially vigllant around fire weakened trees and snags!!!!


# SAFETY MESSAGE SAFETY IS OUR FIRST PRIORITY 

Fire fighter safety comes first on every fire, every time

## MAJOR HAZARDS AND RISKS

- Snags-heads up!
- Bees and Yellow Jackets.
- Spotting and torching--LCES
- Rocky Terrain.
- Dehydration-drink plenty of fluids
- Driving—Narrow Roads
- L- Lights
- C- Chock Blocks
- E- Emergency Brake
- S- Seat Belts


## Thunderstorms May Be In Our Future



Treat lightning like a snake: if you see it or hear it take evasive measures

- Stay out of dry creek beds
- Do not use radios or telephones
- Put down all tools
- Sit or crouch if in open country
- Avoid grouping together
- Do not handle flammable materials in open containers
- Stay in your vehicle. Take shelter in vehicles if possible.
- Turn off machinery, electric motors
- Take shelter in a building, if available
- When there is no shelter, avoid high objects such as lone trees. If only isolated trees are nearby, the best protection is to crouch in the open, keeping a distance of twice the height of the tree away.
- Keep away from wire fences, telephone lines, and conductive elevated objects.
- Avoid ridge tops, hilltops, wide-open spaces, ledges, rock outcroppings, exposed shelters
- Advise crew that if they feel an electrical charge-if their hair stands on end or their skin tingles-lightning may be about to strike them. Drop to the ground immediately.


## 7/25

> If you have severe reactions to Bee / Wasp stings don't keep it a secret tell those folks your working with.

## Bee and Wasp Stings

Bees \& Wasps can cause a severe allergic reaction (Anaphylactic Shock) in some people if bitten or stung. Allergic reactions to bee and wasp stings can develop anywhere on the body and may include non-life-threatening reactions such as hives, swelling, nausea, vomiting, abdominal cramps, and headaches. Life-threatening reactions such as Anaphylactic Shock, dizziness, unconsciousness, difficulty in breathing, swelling of the hands, face \& extremities, nausea \& vomiting, and in some cases a feeling of impending doom, and laryngeal blockage resulting from swelling in the throat require immediate medical care. Symptoms can begin immediately following the sting or up to 30 minutes later and may last for hours.

Fire Fighter \& Public Safety Is The \#1 Priority
Let's have a tailgate session and talk about what it takes to ensure success for our \#1 priority

| DIV | TACTICAL WATCHOUTS | LCES HAZARD CONTROL <br> ** Denotes Common Denominator of Tragedy Fires |
| :---: | :---: | :---: |
|  | Indirect Fire line Downhill Fire line Under-slung Fire line Mid-slope Fire line Frontal Assault Unburned Fuel Unanchored Line Light Fuels** Uphill Runs** | - Staff dedicated lookouts at pre-identified vantage points <br> - Staff aerial lookout. During major threatening activity, assess \& provide direction <br> - Establish human repeater site <br> - Take hourly weather observations over command frequency <br> - Abort assignment if communications cannot be maintained <br> - Weather watch system to be developed by FBAN/Meteorologist <br> - Flag, time, improve/construct multiple escape routes and safety zones <br> - Establish situation trigger points for disengagement/exit to safety zones <br> - Improve/construct safety zones prior to tactical operations |
| $\begin{aligned} & \text { A\&B-------- } \\ & \text { A\&B-- } \end{aligned}$ | Spotting <br> Torching <br> Crown Runs | - Post lookouts ; Watch for smoldering fires picking up over large areas, trees crowning out inside of fire line, high sustained rate of spread, well-developed convection column, hot/dry weather <br> - Grid green areas ; Patrol for spots especially after torching |
| ALL------ | Crew Fatigue Altitude Sickness | - Take rest breaks. Limit work to 2:1 work-rest ratio. Rotate crews out after 14 days. <br> - Check feet, upper respiratory, attitude (complacency) Allow no horseplay. |
| TFR <br> In place | Intruder Aircraft | - Designate TFR over the air operations area. Report airspace conflicts/ intrusion immediately to Air Support <br> - Curtail air operations, as needed, until airspace is clear |
|  | Air Support Dependent | - Staff dedicated lookouts at pre-identified vantage points. <br> - Staff aerial lookout. During major threatening activity, assess \& provide direction <br> - Do go/no go assessment for ground operations. Ensure that firefighter safety is not compromised |
|  | Bucket Drops Retardant Drops | - Ensure clear air-ground communications, stay clear of flight/drop zones, watch for snags/hazard trees. <br> - Watch out for rotor wash or air tanker turbulence and potentially erratic fire behavior. |
|  | Air Crew Shuttles | - Ensure that a Chief of Party is assigned for transport of multiple personnel <br> - Ensure proper wearing of PPE. Follow instructions of Helitack for loading and unloading. |
| $\begin{aligned} & \text { ALL--------- } \\ & \text { ALL------------ } \\ & \text { ALL----- } \\ & \text { ALL---- } \\ & \text { ALL- } \end{aligned}$ | RH<25\% <br> Temps $>85 \mathrm{~F}$ <br> Direct Sun <br> Dead/Dying Fuels <br> Fuel Loads >10T/Ac <br> Winds>10MPH** | - Watch potential for torching, spotting, re-burn, and erratic, extreme fire behavior <br> - Staff dedicated lookouts at pre-identified vantage points <br> - Take hourly weather observations over command frequency <br> - Establish effective radio repeaters to reach all divisions. Confirm radio frequencies <br> - Consider vegetation and terrain and flag and time multiple escape routes <br> - Improve/construct safety zones |
| ALL | Slopes>50\% Rolling Rocks | - Identify chimneys, gullies, and/or steep slopes in work area <br> - Post lookouts, issue warnings. Keep crews from below known hazard areas <br> - Improve/construct, flag/time escape routes and safety zones <br> - Identify, flag, avoid rock hazards. Make sure you go slowly and watch your step <br> - Wear proper and good condition fire boots to avoid slips and falls. <br> - Always carry tools on the downhill side. and maintain 10 feet spacing |
| ALL | Lightning Storms | - Watch for sudden reversal of wind direction and increased speed, drop in temperature <br> - Don't use the radio or telephone; turn off generators and electrical equipment. Put down hand tools <br> - Avoid grouping together, sit/crouch, or if in open country stay in vehicle if possible <br> - Avoid standing near high objects, ridge tops, open spaces, ledges, rock outcroppings <br> - Keep away from wire fences; move away from horses and stock |
| ALL------------- | Dehydration <br> Heat Stress <br> Altitude >9,000' | - Drink plenty of fluids ( $1 \mathbf{q t} / \mathbf{h r}$ ); ensure adequate replacement of water supplies <br> - Limit shift lengths. Pace work; allow frequent periods of rest in shade, if possible <br> - Acclimate to extreme heat and/or altitude; schedule hardest work during cooler hours of the day <br> - Monitor fitness of crews for assignments |
|  | Poor Communications | - Establish effective radio repeaters to reach all divisions. Confirm radio frequencies <br> - Warn ground forces of possible gaps in the repeater frequencies; advise to contact air tactical if necessary |
| ALL | Snags | - Stay alert for strong winds, steep slopes, bug-kill, air operations and shallow rooted trees. <br> - Scout, identify and flag hazards, fell dangerous trees near the fire line. <br> - Do go/no go assessment prior to falling. Post lookouts assess trees in work area, issue warnings. |
|  | Inadequate Crews (Type I crews) | - Consider disengagement if air tanker and/or helicopter support resources are lost <br> - Do go/no go assessment for ground operations. Retreat if the situation is too complex <br> - Evaluate suppression strategy, providing for fire fighter safety first |
|  | Inversion | - Limited air operations; Increased fire activity when inversion lifts. |
| ALL | Wildland-Urban | - Cooperate with the local Sheriff's office in conducting appropriate information exchange with local communities. Determine accessibility and need for traffic controls. Remove natural fuels within 30 feet of structures. Evacuate local citizens, livestock, pets, etc. Identify power-lines, poles, etc Assess available water supplies. Identify and make aware of propane and above ground fuel tanks |




ICS 206

## Suppression Rehabilitation Plan

Last Updated: July 19, 2013*

## Pine Creek Fire

Boise County, Idaho

## Boise National Forest - Idaho City Ranger District

Fire suppression activities employed to contain and control the fires created several disturbances which will require rehabilitation.

## Objective:

To mitigate impacts from fire suppression activities. Implementation of this plan will be in compliance with all pertinent rules and regulations regarding implementation activities, and will comply with management direction and standards and guidelines contained in the Boise National Forest Plan.

1. Firefighter Safety - Ensure all suppression rehabilitation work is done in a safe and efficient manner.
2. Vegetation and Soils - Mitigate short-term erosion damage; re-establish vegetation to prevent long-term soil erosion, and minimize invasion of new, or spread of existing, noxious weeds.
3. Water Quality - Minimize sediment delivery into streams and drainages in order to maintain water quality. Restore drainage patterns along machine firelines and other disturbed sites. Mitigate all chemical or fuel contaminations.
4. Heritage Resources - Protect cultural resources that were impacted. Rehabilitate areas where fire suppression activities may have destabilized slopes that may compromise known sites.
5. Travel and Access Management - Restrict motorized vehicle travel that may have been created by construction of firelines. Re-establish road or trail obstructions to pre-incident conditions.
6. Cleanup - Remove all suppression-related material (equipment, debris, trash, signing and flagging) at all sites.

## Goals:

1. The goal of these guidelines is to mitigate or eliminate environmental resource impacts caused by fire suppression activities.
2. Restoration of the burned area is the responsibility of the landowner, not IDL's fire program.
3. Maintain safe road access on previously existing roads and eliminate access on roads that were opened for fire suppression activities.
4. Protect all cultural resource sites.
5. Minimize erosion losses to maintain soil productivity.
6. Protect water quality for TMDL listed streams and municipal watersheds.
[^0]
## Hand line

- Restore constructed hand line by placing debris, limbs, and displaced soil into cupped and trenched hand line.
- Install water bars that slope in a manner (45-60 degrees to the fire line) to move flowing water off the line to the down slope side. Always place a water bar at a slope change and reevaluate spacing interval. Water bars can be made out of rock, logs or drainage dips cut out of the parent soil material.

| Maximum Waterbar Spacing General Guidelines |  |
| :---: | :---: |
| Slope | Maximum spacing (feet) |
| $10-20 \%$ | 75 |
| $20-40 \%$ | 50 |
| $>40 \%$ | 25 |

- Obliterate the first 200 feet of fireline that ties into or crosses an existing roads and trails. Utilize existing downed material to effectively stop access to fire line that has the potential to be used for new motorized use.
- The outlet end of the waterbar needs to be open and of adequate length to allow free flow of water from the line and to prevent runoff from re-entering the line below.
- Ensure that the last crew down the line reconstructed any trampled waterbars.
- Remove all flagging and pack out trash.


## Dozer Line

- Use of an excavator with bucket and thumb when available is preferred for cross- ditching, working in stream crossing areas, or pulling berms or slash back onto the fireline. If an excavator is not available, a dozer with 6-way blade should be used.
- Where firelines intersect with roads or trails, restore the road or trail to original width and prism. When required, place boulders, logs, or slash to camouflage any entrance used by motorized vehicles to render them impassible.
- Backblade berms and evenly spread material or slash across the fireline to natural contour.
- A READ will work directly with the excavator as work is implemented on all dozer line rehab.
- Pull sufficient slash, debris and berms back onto the line. Install waterbars as per table above.
- Camouflage the entrance to the dozer line at the junction of the line and all roads and trails to prevent off-road access. Use slash and install an earthen berm.


## Water drafting or pump sites

- Rehab pump sites as appropriate, including any soil disturbance (cover with slash and sod) and re-contouring as needed to return to near-original conditions.
- Remove all soil, rock, and plastic dams used for pumps or impoundments.
- Remove all plastic, trash and other foreign materials from the site. Ensure no gas or oil residue remains on streambanks by using absorbent pads to soak up any residue.


## Drop Points, Access Roads and Trailheads

- Remove all signs and flagging.
- Ensure that all trash (cardboard boxes, bags, misc. supplies) are removed from the road sides and trailheads.
- Scarify and seed any bare soil areas created by suppression activities (i.e parking areas).
- Blade as appropriate.


## Spike Camps

- Recontour sleeping or tent pads. Scatter duff, logs and/or rocks over sites as appropriate.
- Pick up and remove all trash, including cigarette butts and flagging.
- Backfill pit toilets with soil and cover with slash or other forest litter to resemble natural conditions.


## Level 2 and above classified roads

- Apply water and grade. Reinstall waterbars where roads were improved for the fire.
- Snag roads/trails to insure safe travel for the fire fighters, BAER and public during and after fire suppression activities. Only fall trees that are a true hazard which are leaning into the road.


## Decommissioned and unclassified roads

- Block entrance to road at Carsonite sign with rocks or other material available.
- Seed and scarify material over disturbed area.


## User-created two-track

- Camouflage entrance to roads and trails by pulling slash and other material to discourage use.
- Seed and scarify material over disturbed area.
- Post "no motor vehicles" Carsonite sign at entrance.


## Vault toilets

- Pump forest outhouses when spike camps are removed.


## ICP, Base Camp and weed wash stations

- Remove all debris, signs, flagging, and micro trash.
- Evaluate and seed as needed.
- Blade access roads as appropriate.
- Blade and roll airstrip as appropriate.


## Helibase

- Remove all debris, signs, flagging, cigarette butt... when dismantled.
- Evaluate area for fuel spills.
- Evaluate and seed as needed.
- See pump standard.


## Staging areas

- Remove all signs, flagging, garbage and micro trash.
- Evaluate area for fuel spills.
- Evaluate and seed as needed.


## Cultural Sites

- Where suppression activities occurred in or near cultural sites, a specific rehab plan will identify standards and be inserted into this plan as an appendix.
- A qualified archaeologist or resource advisor will work directly with rehab crew at each site.
- The archeologist will ensure that all previously known and newly discovered cultural sites will not be impacted (or further impacted) by rehabilitation activities.
- It will be the responsibility of the Boise National Forest Archeologist to notify and consult with appropriate agencies.


## Unique and or extraordinary circumstances

- Where suppression activities occurred in or near sensitive areas or where the generic standard does not apply, a specific rehab action will identify the standards and be inserted into this plan as an appendix.
- All seeding would be implemented in late fall by the Boise National Forest.


## Recommended Seed mixture

## All seed to be purchased in pounds of Pure Live Seed (PLS). All orders to include the statement "No Noxlous Weed Seed"

Table 1. Recommended Mid-Elevation seed mix for Pine Creek Fire (based on Douglas-fir habitat types and seed sixe). (July 18, 2013) - See Attachment for Potential Vendors

| (2x) |  |  |  |
| :---: | :---: | :---: | :---: |
| Sterile Triticale Hybrid | (Triticum aestivum $\mathbf{x}$ Secale cereale) | Quickguard | 10 |
|  |  | Annual lbs/acre | 10 |
|  | - |  |  |
| Bluebunch wheatgrass (PSSPS) <br> (Alternative - Slender Wheatgrass | Pseudoroegneria spicata ssp spicata <br> (Elymus trachycaulus ssp trachycaulus) | BNF if available/ or Goldar cultivar (Pryor) | 5 |
| Mountain brome (BRMA4) <br> (Alternative - Columbia brome) | Bromus marginatus <br> (Bromus vulgaris) | BNF if available or/ Bromar cultivar <br> (Commercial source, no cultivars available) | 7 |
| Idaho fescue (FEIDI2) | Festuca idahoensis | BNF if available/or Joseph cultivar | 2 |
| Wheeler bluegrass (POWH2) <br> ( $2^{\text {nd }}$ choice Canbyi bluegrass) <br> $3^{\text {rd }}$ choice - Sandberg's bluegrass <br> (POSA12) | Poa wheeleri (P.nervosa var. wheeleri) <br> (Poa secunda var canbyi) <br> Poa sandbergii | Commercial source, no cultivars available <br> (Canbar) <br> Mountain Home <br> Germplasm or Duffy Creek or Wallowa or Reliable or Sherman or (in this order) | 1 |
| Western Yarrow | Achillea millefolium | BNF if available, otherwise skip | . 05 |
|  |  | Perennial lbs/acre | 15 |
|  |  |  |  |
| Annual + Perennial Seed |  | Total Lb/Acre Seed | 25.05 |

[^1]Seed Companies:


## Suppression Rehabilitation Monitoring

Monitoring of suppression rehabilitation efforts - related rehabilitation activities will be completed by Resource Advisors or other District personnel in the fall of 2013 and spring of 2014.

We agree that this plan is acceptable and will be implemented cooperatively by fire and Forest personnel in an effort to mitigate resource damage incurred during fire suppression activities.

Approved by:


Agency Representative


Date
State of Idaho


Agency Representative Boise National Forest


# Suppression Rehabilitation Plan 

Last Updated: July 21, 2013*

## Summit Fire

Boise County, Idaho

## Boise National Forest - Idaho City Ranger District

Fire suppression activities employed to contain and control the fires created several disturbances which will require rehabilitation.

## Objective:

To mitigate impacts from fire suppression activities. Implementation of this plan will be in compliance with all pertinent rules and regulations regarding implementation activities, and will comply with management direction and standards and guidelines contained in the Boise National Forest Plan.

1. Firefighter Safety-Ensure all suppression rehabilitation work is done in a safe and efficient manner.
2. Vegetation andSoils-Mitigateshort-term erosiondamage; re-establish vegetation to prevent long-term soil erosion, and minimize invasion of new, or spread of existing, noxious weeds.
3. Water Quality -Minimize sediment delivery into streams and drainages in order to maintain water quality. Restore drainage patterns along fire lines and other disturbed sites. Mitigateall chemical or fuel contaminations.
4. Heritage Resources-Protect cultural resources that were impacted. Rehabilitate areas where fire suppression activities may have destabilized slopes that may compromise known sites.
5. Travel and Access Management-Restrict motorized vehicle travel that may have been created by construction of fire lines. Re-establish road or trail obstructions to pre-incident conditions.
6. Cleanup-Remove all suppression-related material (equipment, debris, trash, signing and flagging) at all sites.
Goals:
7. The goal of these guidelines is to mitigate or eliminate environmental resource impacts caused by fire suppression activities.
8. Maintain safe road access on previously existing roads and eliminate access on roads that were opened for fire suppression activities.
9. Protect all cultural resource sites.
10. Minimize erosion losses to maintain soil productivity.
11. Protect water quality for TMDL listed streams and municipal watersheds.
[^2]Handline(All Divisions)- Once mop-up standards are met, or otherwise agreed to:

- Restore constructed handline by placing debris, limbs, and displaced soil into cupped and trenched handline.
- Install water bars that slope in a manner (45-60degrees to the fire line) to move flowing water off the line to the down slope side. Always place a water bar at a slope change and reevaluate spacing interval. Water bars can be made out of rock, logs or drainage dips cut out of the parent soil material.

| Maximum Water bar Spacing General Guidelines |  |
| :---: | :---: |
| Slope | Maximum spacing (feet) |
| $10-20 \%$ | 75 |
| $20-40 \%$ | 50 |
| $>40 \%$ | 25 |

- Obliterate the first 200 feet of fireline that ties into or crosses an existing roads and trails. Utilize existing downed material to effectively stop access to fire line that has the potential to be used for new motorized use.
- Obliterate first 100 feet of fire line that ties directly into or crosses actively flowing or dry stream channel beds.
- The outlet end of the water bar needs to be open and of adequate length to allow free flow of water from the line and to prevent runoff from re-entering the line below.
- Ensure that the last crew down the line reconstructed any trampled water bars.
- Remove all flagging and pack out trash.


## Water drafting or pump sites (Division M and P )

- Rehab pump sites as appropriate, including any soil disturbance (cover with slash and sod) and re-contouring as needed to return to near-original conditions.
- Remove all soil, rock, and plastic dams used for pumps or impoundments, re-contour/rehab to near-original conditions.
- Remove all plastic, trash and other foreign materials from the site. Ensure no gas or oil residue remains on streambanks by using absorbent pads to soak up any residue.


## Drop Points, Access Roads and Trailheads (Division P and Z)

- Remove all signs and flagging.
- Ensure that all trash (cardboard boxes, bags, misc. supplies) are removed from the road sides and trailheads.
- Scarify and seed any bare soil areas created by suppression activities (i.e parking areas).
- Blade as appropriate.

Spike Camps (Division P and Z)

- Re-contour sleeping or tent pads. Scatter duff, logs and/or rocks over sites as appropriate.
- Pick up and remove all trash, including cigarette butts and flagging.
- Backfill pit toilets with soil and cover with slash or other forest litter to resemble natural conditions.
- Emphasize "Leave No Trace" outcomes for both spike camps.
- Apply water and grade as needed. Reinstall waterbars where roads were improved for the fire.


## Designated OHV Trail (NFS 163 Trail - Div P and Z)

- Install/reinstall waterbars where trail was improved or impacted by suppression activities.
- Pull back displaced soil where suppression-related motor vehicle travel has impacted (such as out-sloped sections of trail); Delay rehab implementation until such time as sufficient soil moistures is present to successfully complete (BNF responsibility).
- Snag trails within fire perimeter to insure safe travel for the fire fighters, BAER and public during and after fire suppression activities. Only fall trees that are a true hazard which are leaning into the road.


## Suppression-created two-track (Div P and Z)

- Full rehab suppression created two-tracks; return displayed soils to tread, camouflage with debris to discourage use.
- Seed and scarify material over disturbed area.
- Post "no motor vehicles" Carsonite sign at entrance; Forest to implement signing as needed.

ICP, Base Camp and weed wash stations

- Remove all debris, signs, flagging, and micro trash.
- Blade access roads as appropriate.


## Helibase (Base Camp)

- Remove all debris, signs, flagging, cigarette butts... when dismantled.
- Evaluate area for fuel spills.
- See pump standard.


## Staging areas and Remote Fuel Spot (Pioneerville)

- Remove all signs, flagging, garbage and micro trash.
- Evaluate area for fuel spills.
- Evaluate and seed as needed.


## Unique and or extraordinary circumstances

- Where suppression activities occurred in or near sensitive areas or where the generic standard does not apply, a specific rehab action will identify the standards and be inserted into this plan as an appendix.
- All seeding, as referenced above, would be implemented in late fall by the Boise National Forest.


## Suppression Rehabilitation Monitoring

Monitoring of suppression rehabilitation efforts -related rehabilitation activities will be completed by Resource Advisors or other District personnel in the fall of 2013 and spring of 2014.

We agree that this plan is acceptable and will be implemented cooperatively by fire and Forest personnel in an effort to mitigate resource damage incurred during fire suppression activities.

Approved by:


State of Idaho



9. Prepared by (Name and Position)

FIRE DANGER -- Summit Fire
Maximum. Average, and 90 th Percentile, based on 13 years data


## Fire Danger A rea:

- Summit Fire
- Fire Weather Zone 421
- TownCk, LittleAnd, PineCk
- Meets NWCG Wx Station Standards


## Fire Danger Interpretation:

EXTREME - Use extreme caution
(Caution) - Watch for change
Moderate - Lower Potential, but ahways be aware

Maximum - Highest Energy Release Component by day
for 2000-2012
Average - shows peak fire season over 13 jears ( 2352 observations) 90th Percentile - Only 10\% of the 2352 days from 2000-2012 had an Energy Release Component above 84
Local Thresholds - Watch out: Combinations of any of these factors can greatly increase fire behavior: $20^{\prime}$ Wind Speed over 5 mph , RH less than $25 \%$, Temperature over 80, Energy Release Component over 69

Years to Remember: 200620122013

Responsible Agency. Boise National Forest
FF+4.0.2 07/22/2013-10:05 (C:: Program Files (x86) (FireFamilyPlus 4lffplus4)




[^0]:    *This Suppression Rehab Plan will be periodically reviewed and updated as needed when Divisions close out.

[^1]:    ${ }^{1}$ If seed for recommended species not available, contact Project Botanist for mix revision.
    ${ }^{2}$ Cultivars may be used if locally collccted native seed not available.
    ${ }^{3}$ Heavy application rate recommended because of high rush skeletonweed infestation in fire area.

[^2]:    * This Suppression Rehab Plan will be periodically reviewed and updated as needed when Divisions close out.

