

3.3.10. Appendix J: Soda Mountain Wilderness Operations Plan

- **Fire Management**

- ***Fire Management Policy in Wilderness Areas***

The SMW is managed under regulations 43 CFR 6300 Wilderness Management and BLM Manual 8560 “Management of Designated Wilderness Areas.” The following are provisions of the BLM Manual 8560 that direct fire management in the SMW:

- **Fire, Insects, and Diseases** – The BLM allows fire, insects and diseases to play a natural role in the wilderness ecosystem, except where these activities threaten human life, property, or high value resources on adjacent non-wilderness lands, or where these would result in unacceptable change to the wilderness resource (BLM Manual 8560.11A2).
- **Minimum Tool** - Tools, equipment, or structures may be used for management when they are the minimum necessary for protection of the wilderness resource or when necessary in emergency situations for the health and safety of the visitor. Management must use the *minimum* tool, equipment, or structure necessary to successfully, safely, and economically accomplish the objective. The chosen tool, equipment, or structure should be the one that least degrades wilderness values temporarily or permanently (BLM Manual 8560.13).
- **Acceptable tools** - Acceptable tools, equipment, and structures may include but are not limited to: fire towers, patrol cabins, pit toilets, temporary roads, spraying equipment, hand tools, fire-fighting equipment caches, fencing, and controlled burning. In special or emergency cases involving the health and safety of wilderness visitors, or the protection of wilderness values, aircraft, motorboats, and motorized vehicles may be used (BLM Manual 8560.13A).
- **Overriding Fire Guidance for Wilderness Areas** – All fires must be controlled to prevent loss of human life or property within wilderness areas or to prevent the spread of fire to areas outside of the wilderness where life, resources, or property may be threatened. Human-caused wildfires must be prevented and/or controlled unless the fire meets wilderness fire management objectives (BLM Manual 8560.35A1).
- **Natural Fire** – Natural fire (lightning-caused) is normally a part of the ecology of the wilderness, and human efforts to ban this agent have resulted in significant ecological changes in flora and fauna of some areas. In order to return some wilderness ecosystems to a more natural state, it may be appropriate to allow natural fire to burn, but only in conformity with an approved Resource and Fire Management Plan and the overriding fire guidance (above paragraph) (BLM Manual 8560.35A2).

- ***Federal Wildland Fire Management Policy***

The *Review and Update of the 1995 Federal Wildland Fire Management Policy* (January 2001) is the primary interagency wildland fire policy document. The *Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy* (June 20, 2003) was developed and approved under the authority of the Wildland Fire Leadership Council (WFLC) to set forth direction for consistent implementation of the federal fire policy. In 2009, the 2003 *Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy* was replaced by the *Guidance for Implementation of Federal Wildland Fire Management Policy* (GIFWFMP) (February 2009).

The CSNM ROD/RMP (USDI 2008) included and integrated the 1995/2001 and 2003 policies into the ROD/RMP. However, this predates the policy changes adopted in February 2009.

Elements of the Federal Wildland Fire Management Policy that Influence Fire Management in SMW
The following policy statements relate to fire management in the SMW (GIFWFMP February 2009, pages 10-15):

- **Safety** - Firefighter and public safety is the first priority.
- **Fire Management and Ecosystem Sustainability** - The full range of fire management activities would be used to help achieve ecosystem sustainability, including interrelated ecological, economic, and social components.
- **Response to Wildland Fire** - Fire, as a critical natural process, would be integrated into land and resource management plans and activities on a landscape scale across agency boundaries. Response to wildland fires is based on ecological, social, and legal consequences of the fire. The circumstances under which a fire occurs, the likely consequences to firefighter and public safety and welfare, the natural and cultural resources and the values to be protected dictate the appropriate response to fire.
- **Use of Wildland Fire** - Wildland fire would be used to protect, maintain and enhance resources and, as nearly as possible, be allowed to function in its natural ecological role. Use of fire would be based on approved Resource Management Plans, Fire Management Plans and would follow specific prescriptions contained in operational plans.
- **Protection Priorities** - The protection of human life is the single overriding suppression priority. Setting priorities among protecting public communities and community infrastructure, other property and improvements and natural and cultural resources would be done based on the values to be protected, public health and safety, and the costs of protection. Once people have been committed to an incident, these human resources become the highest value to be protected.
- **Suppression** - Fires are suppressed at minimum cost, considering firefighter and public safety, benefits and all values to be protected consistent with resource objectives.

Fire Management in the SMW and 2009 Changes in Policy

Changes in guidance in policy that have implications for fire management actions in SMW include the following (GIFWFMP, pages 19-20):

- **Fire Terminology** - The 2009 changes now define wildland fire as: A general term describing any non-structure fire that occurs in the wildland. Wildland fires are now categorized into two distinct types:
Wildfires – Unplanned ignitions or prescribed fires that are declared wildfires.
Prescribed Fires - Planned ignitions.

Prior to 2009, wildland fire included three types of fire: wildfire, wildland fire use, and prescribed fire. Wildland fire use (the use of a naturally occurring fire for resource benefit) is no longer a separate type of fire. The new terminology and policy recognizes that wildfire and prescribed fire can be used to protect, maintain, and enhance resources.

- **Human Caused Wildland Fires** – The 2009 change is that, “Initial action on human-caused wildfire will be to suppress the fire at the lowest cost with the fewest negative consequences with respect to firefighter and public safety.” Prior to 2009, the policy was “Human-caused wildland fires will be suppressed in every instance and will not be managed for resource benefits.”

- **Wildland Fire Management Objectives** – The 2009 changes now state: “A wildland fire may be concurrently managed for one or more objectives and objectives can change as the fire spreads across the landscape. Objectives are affected by changes in fuels, weather, topography; varying social understanding and tolerance; and involvement of other governmental jurisdictions having different missions and objectives.”

Prior to this change only one management objective was allowed to be applied to a wildland fire. Wildland fires were either managed for resource benefits or suppressed. A wildland fire could not be managed for both objectives concurrently, and once a wildland fire had been managed for suppression objectives, it could never be managed for resource benefit objectives.

- ***Wildland Fire Suppression Objectives***

The CSNM ROD/RMP analysis acknowledged the “important role fire has played in influencing historical ecological processes and continues to be recognized as a needed component in the development and maintenance of vegetative diversity in fire-adapted ecosystems found throughout the CSNM (USDI 2008, page 17).” However, the decision made in the CSNM ROD/RMP was that the only option would be a full suppression response. This was based on the ownership patterns and logistic constraints. Allowing the use of natural fire for resource benefit and the achievement of ecological objectives by not immediately suppressing fires was not included in any alternative.

This analysis and decision predated the changes to fire policy in 2009. In August 2008, when the CSNM ROD/RMP was completed, the policy was still three types of wildland fire: wildfires, wildland fire use, and prescribed fire, and fires could only have one objective.

Current Suppression Policy - Response to wildland fires is based on ecological, social, and legal consequences of the fire. The circumstances under which a fire occurs, the likely consequences to firefighter and public safety and welfare, the natural and cultural resources and the values to be protected dictate the appropriate response to fire.

Potential to Utilize Wildfire for Wilderness Resource Benefit - The ability to utilize wildfire for resource benefit is very limited. The potential acres that perhaps would be allowed to burn for resource benefit would be measured in the tens of acres, less often in hundreds of acres, but extraordinarily rare in the thousands of acres. This is due to the small size of the SMW, the presence of private lands within wilderness boundaries, the adjacent high value resources, air quality considerations, and the number of days that southwest Oregon experiences high to extreme fire behavior potential during fire season. Decisions on the response to a wildfire will consider the topography, limited access, fuel types, and extent of moderate and high hazard conditions, and minimum tools available. Firefighter safety conditions will dictate how direct or indirect the fire would be controlled. Fires that start outside of peak fire season, burning with lower than average intensity conditions typically can be safely direct-attacked by firefighters. During peak fire season, when fires burn with greater than average intensity, indirect attack is often necessary for firefighter safety. Firefighter safety considerations have the potential to result in more indirect suppression actions and therefore, result in additional acreage burned, beneficial or not.

The following is a hypothetical example of how this change could influence wildland fire suppression in the SMW: A wildfire burning in the SMW has one side (west side) of the fire threatening to leave the wilderness boundary and burn onto private property, threatening public safety. The opposite side (east side) has no threat to private property, public safety, and is not a threat to leave the wilderness.

The objective on the west side of the fire would be an immediate need to aggressively suppress the spread of the fire. On the east side, it is determined that fire intensity level and behavior are a benefit and producing no unacceptable change to the wilderness resource. There is no threat to human life, property, or high value resources on adjacent non-wilderness lands. There is no urgent, without delay, need for stopping the fire spread on this side of the fire. The fire would be suppressed; however, the decision on the location and tactics to use can integrate the benefit to wilderness resource objectives into the decision process. The process would include situational assessment, analyze hazards and risk (mainly for firefighters), define implementation actions, and document decisions and rationale for those decisions. The result would be additional burned acres (beneficial), along with potentially enhanced safety for firefighters and reduced suppression costs.

- ***Fire Suppression Organization***

The Bureau of Land Management has a contract with the Oregon Department of Forestry (ODF) to provide fire prevention, detection and suppression services. This contract directs ODF to take immediate action to control and suppress all fires. Their primary objective is to minimize total acres burned while providing for firefighter safety. ODF is required to be consistent with BLM resource management objectives in selecting suppression action alternatives, and when conducting suppression actions on BLM lands.

- ***Fire Facilities***

Water Sources - There are six existing water source installations within the wilderness boundary that have been identified by ODF and BLM as necessary for fire suppression and the health and safety of wilderness visitors (Map 15). These water sources are considered crucial for fire suppression and the use of water is considered the least degrading to wilderness values. All six of these are water impoundments were originally developed for the fire suppression purposes. Routine maintenance and repair of these structures will occur as needed. There will be no change to the location, size or type, nor increase to the original capacity of these water sources. It is anticipated that needs and methods will include the use of hand tools, and replacement parts and materials. The potential need for the use of small power equipment may arise, and the potential for aerial delivery of personal and equipment exists. All maintenance and repair actions would have a Minimum Requirement Analysis to determine the minimum tools and equipment necessary to successfully, safely, and economically accomplish the objective.

Helispots – There are three helispot locations within the wilderness identified by ODF and BLM as the minimum necessary for fire suppression and emergency situations for the health and safety of visitors (Map 15). These helispots require minimal clearing of natural vegetation. Routine maintenance needs and methods will include the use of hand tools and the potential for the use of chainsaws exists. The helispots will be cleared of stumps, brush, posts, large rocks or anything over 18 inches high. The safety circle would be 75, 90, or 110 feet in diameter, with touchdown pads 15 ft. x 15 ft., 20 ft. x 20 ft., or 30 ft. x 30 ft. in size based on needs for Type III, Type II, or Type I helicopters, respectively. All maintenance and repair actions will have a Minimum Requirements Analysis to determine the minimum tools and equipment necessary to successfully, safely, and economically accomplish the objective.

- ***Fire Suppression Actions***

The following general framework will be used when suppressing fires in the SMW:

- Provide for the natural role of fire in wilderness. Use of wildland fire is allowable to meet wilderness management objectives consistent with the 1964 Wilderness Act, legislation establishing the wilderness area, and BLM wilderness management regulations.

- The long-range objective is to allow fire in the SMW to play, as nearly as possible, its natural, ecological role—while, at the same time, not compromising public and firefighter safety or resource values outside of the wilderness.
- All wildfires will have a management response, including consideration of the use of wildland fire. Because of the relatively small size of this wilderness, proximity of Interstate 5, adjacency to the Ashland/Medford Air Quality Management Area (AQMA), and adjacent high value resources, opportunities to use wildland fire to maximize resource benefits may be limited, but should be considered and taken advantage of when appropriate.
- Minimum Impact Suppression Tactics (MIST) guidelines would be followed in an effort to minimize impacts to wilderness character (Appendix C). Any actions deemed necessary by the Incident Commander for public and firefighter safety would be authorized.
- The existing six water sources and three helispots will be retained in the SMW. They are necessary for conducting fire suppression and for the safety of firefighters. They conform to the minimum tool policy as permitted by the Wilderness Act. The ability to use water to control wildfire is considered the least degrading to wilderness values because it reduces the need for fireline construction. The pre-approved designated helispots were chosen for their strategic locations, minimal need to initially clear vegetation, and minimal need for maintenance in the long-term. Retention of these helispots will provide potentially less need for future, emergency helispot construction, no time delay in deploying firefighters, and known evacuation locations. It is anticipated that water source installations and helispots may require a level of maintenance in the long-term. They would be maintained for continued use until such time, if and when, they are determined to no longer qualify for retention under the minimum tool criteria.
- Fire response strategies and tactics should provide for a high degree of public safety and the least amount of operational impairment. Closure of the Pacific Crest National Scenic Trail to use by the public should be avoided in all but extreme cases.
- The Southwest Oregon Interagency Fire Management Plan (FMP) will incorporate SMW resource and management objectives identified in this *Final Soda Mountain Wilderness Stewardship Plan* and the fire suppression guidelines in Appendix C.

- ***Implementation of Rehabilitation of Damages from Suppression Operations***

The goal of wildfire rehabilitation in wilderness is to mitigate or eliminate impacts caused by the fire suppression effort and rehabilitation of the area to as natural a condition as possible. This goal coincides with the intentions of the Wilderness Act, which states: “...wilderness is an area affected primarily by nature, with human activity substantially unnoticeable...” In the case of wildfire suppression, it is the human involvement that has the potential to be the damaging effect on the wilderness resource, even more so than the effects of the fire.

The following general guidance would be used in rehabilitating damages to wilderness character from fire suppression activities:

- BLM policy emphasizes the need to rehabilitate areas disturbed during the fire suppression effort to as natural an appearance as possible.
- Rehabilitation of damages caused from suppression operations will not be the typical BLM standards used on non-wilderness fires.
- Prior to the start of fire season, BLM and ODF personnel will meet to review the wilderness standards and practices used in wilderness rehabilitation. Examples of these are shown in Appendix D.

- Knowledge and understanding of the standards and practices used in wilderness rehabilitation prior to initial attack can be beneficial in selecting and implementing suppression actions which will reduce the amount of rehabilitation needed.
- BLM and ODF will jointly develop a rehabilitation plan as early as possible during the incident to minimize costs.
- ODF and BLM Resource Advisor(s) will need to communicate and collaborate early to ensure efficiency in the rehabilitation work.
- If any motorized vehicle access is used, routes and evidence of human activity would be removed or rehabilitated to the maximum extent possible upon completion of the reclamation work.
- Should seeding be required, the use of certified, weed-free seed and/or the use of species known to compete with invasive species that are known or likely to be present post-fire will be used.

Specific guidelines for rehabilitation practices following wilderness fire suppression activities in the SMW are in located in Appendix D.

- ***Prescribed Burning***

Prescribed burning may be implemented when the objective is to retain the wilderness character of the environment and allow ecological processes to function properly. Where the use of natural fire does not meet management objectives, prescribed burning may be approved according to BLM wilderness policy on a case-by-case basis for the following purpose:

- To restore or maintain the natural condition of a fire-dependent ecosystem.
- To restore fire where past fire exclusion measures have interfered with natural and ecological processes.
- Where a primary value of a given area would be perpetuated as a result of the burning.
- Where it will perpetuate a threatened or endangered species.

A detailed, project-level NEPA analysis would be prepared prior to implementing prescribed burning projects within the SMW.

- ***Air Quality Management***

The Clean Air Act Amendments of 1977 designated wilderness areas existing at that time to be Class I Areas. Areas designated wilderness after 1977 are classified as Class II, unless they are additions to existing Class I areas. The Soda Mountain Wilderness area is a Class II, which allows moderate degradation associated with moderate, well-controlled industrial and population growth.

According to the Clean Air Act, air quality reclassification is the prerogative of the states. BLM manages designated wilderness areas as Class II unless they are reclassified by the state as a result of the procedures prescribed in the Clean Air Act, as amended (1977).

- **Appendix C**

- **Fire Suppression Guidelines**

- **Minimum Impact Suppression Tactics**

- **Implementation Guidelines**

- ***Fire Lining Phase***

- Select procedures, tools, and equipment that least impact the environment.
- Whenever possible utilize existing barriers such as rock outcrops, talus slopes, sparsely or non-vegetated areas, and trails as control line locations.
- Give serious consideration to the use of water as a firelining tactic.
- If there is a risk that hose coming direct from a local unit's cache is contaminated with noxious weed seeds, order fresh hose from the regional cache.
- Resource Advisors, Operations Chief, and Logistics Chief should be cognizant of any equipment that is being moved from a non-wilderness fire to a wilderness fire and make attempts to clean equipment of noxious weed seeds prior to it being used in the wilderness.
- In light fuels consider:
 - Cold-trail line. Constantly recheck.
 - Allowing fire to burn to natural barriers.
 - Burn out and the use of a "gunny" sack or swatter.
 - If constructed fireline is necessary, use minimum width and depth to check fire spread.
- In medium and heavy fuels consider:
 - Use of natural barriers and cold-trailing.
 - Cooling with dirt and water and cold-trailing.
 - If constructed fireline is necessary, use minimum width and depth to check fire spread.
 - Minimize bucking to establish fireline. Preferably move or roll material out of the intended constructed fireline area. If moving or rolling is not possible, or the down log is already on fire, build line around the log and let it be consumed.
- In aerial fuels, brush, trees, and snags:
 - Minimize cutting of trees and snags.
 - Live trees should not be cut unless it is determined they will cause fire spread across the fireline or seriously endanger workers. If tree cutting occurs, cut the stumps flush with the ground and camouflage the cut surface with soil or brush.
 - Scrape around tree bases near fireline if hot and likely to cause fire spread.
 - Identify hazard trees with either an observer, flagging, and/or glow-sticks.
- When using indirect attack:
 - Do not fall snags outside the constructed fireline, unless they are an obvious safety hazard to crews working in the vicinity.
 - On the intended burn-out side of the line, fall only those snags that would reach the fireline should they burn and fall over. Consider alternative means to falling, i.e.: fireline explosives or bucket drops.
 - Review consideration listed above for aerial fuels, brush, trees, and snags.

- ***Spike and Overnight Personal Camp Conduct***
 - Minimize disturbance to land in preparing bedding and campfire sites. Do not clear vegetation, trench, or excavate a flat spot to create bedding sites.
 - Use established latrines where provided. If latrines are not available use the "cat-hole" method of disposing of human waste. Toilet sites should be located a minimum of 200 feet from water sources. Holes should be dug 6-8 inches deep.
 - If a campfire is built for warmth in the evening, build either a pit or mound fire. A fire shelter placed beneath the coals provides extra protection for the soil
 - Use dead and down firewood. Use small diameter wood that burns down more cleanly. Don't burn plastics or aluminum - pack it out with the rest of the camp garbage.
 - If a designated personal washing area is not provided, carry water and bathe away from lakes and streams. Do not introduce soap, shampoo, or other personal grooming chemicals into waterways.
 - Do not use nails in trees.
 - Constantly evaluate the impacts that will occur, both short and long term.

- ***Helispot Construction***
 - Whenever possible, locate helibases in weed free areas, to prevent the transport of noxious weeds into wilderness.
 - When planning for helispots, determine the primary function of each helispot, i.e.: crew shuttle, logistical support, or both.
 - If a helispot is only needed for logistical support to deliver and retrieve supplies or gear, consider using a long line remote hook in lieu of constructing a helispot.
 - If a helispot is needed for crew shuttle, consider the minimum size helicopter that could do the job, if you have an option, and still meet suppression objectives.
 - Use natural openings as much as possible. If some tree falling or cribbing is necessary, avoid high visitor use locations unless the modifications can be rehabilitated to be generally unnoticeable. Feather the opening so that it appears more natural looking.
 - Perform an aerial reconnaissance of the fire area and select potential helispots. In determining helispot locations, involve, at a minimum, the Air Operations Manager, responsible land manager or Resource Advisor, and the Helitack Foreman. Consider drawing a sketch and discuss which trees need to be cut to ensure a safe operation for the size of the helicopter deemed necessary or available.
 - If a high level of resource impact is anticipated from a proposed helispot, evaluate carefully whether it is absolutely necessary and if there isn't an alternative outside Wilderness.
 - Whenever possible, the resource advisor should observe the construction of a helispot.

- ***Mop-up Phase***
 - Use gravity socks in streams and/or a combination of water blivits and fold-a-tanks to minimize impacts to streams.
 - Do not bring in any non-native materials to be used for sediment traps in streams. Use of non-native materials creates a risk that noxious weeds will be introduced to the area.
 - Place absorbent cloth under pumps to avoid spilling fuel on the ground.
 - Personnel should avoid using rehabilitated firelines as travel corridors whenever possible because of potential soil compaction and possible detrimental impacts to rehab work, i.e.: water bars.
 - Consider using infrared detection devices along perimeter (aerial or hand-held).

- Align saw cuts to minimize visual impacts from more heavily traveled corridors. Slope cut away from line of sight when possible.
- In light fuels:
 - Cold-trail areas adjacent to unburned fuels.
 - Do minimal spading; restrict spading to hot areas near fireline only.
 - Use extensive cold-trailing to detect hot areas.
- Medium to heavy fuels:
 - Cold-trail charred logs near fireline; do minimal scraping or tool scarring.
 - Minimize bucking of logs to check for hot spots or extinguish fire; preferably roll the logs and extinguish the fire.
 - Return logs to original position after checking or when ground is cool.
 - Refrain from making bone piles; burned and partially burned fuels that were moved should be arranged in natural position as much as possible after they are cold.
 - Consider allowing larger logs near the fireline to burn out, instead of bucking them into manageable lengths. Use a lever or pry bar to move large logs.
- Aerial fuels, brush, small trees, and limbs:
 - Remove or limb only those fuels which, if ignited, have the potential to spread fire outside the fireline
- Burning trees and snags:
 - First consideration is to allow burning trees or snags to burn themselves out or down. Ensure adequate safety measures are communicated.
 - Identify hazard trees with either an observer, flagging, and/or glow-sticks.
 - If burning trees/snags pose serious threat of spreading fire brands, consider attempting to extinguish fire with water or dirt. Felling chainsaw should be last means, consider falling by blasting, if available.

- **Preseason Preparedness**

Prior Authorization:

- BLM will consider the forecasted fire danger, potential seasonal outlook, the late spring fuel conditions, and projected fuel and weather conditions in the wilderness area to determine which tools, equipment, or activities will have preseason authorization.
- BLM will determine which tools, equipment, or activities ODF will be pre-authorized for use in initial attack prior to actual fire occurrence. Preseason knowledge of the available tools, equipment, and activities will allow ODF the basis to prepare and train for wilderness minimum impact suppression tactics (MIST).
- BLM will provide ODF with a written authorization (Figure C-1), signed by the delegated Agency Administrator, typically the Field Manager, which will include the specific tools, equipment, and activities along with any instructions associated with their use, and the names and contact information for BLM employees associated with the wilderness management.
- Annually ODF will determine the services and resources they will provide for the protection of the wilderness area, along with a cost estimate. These will be included in the annual Extreme-risk Mitigation Plan.
- BLM will annually update ODF on any new or changed conditions, issues or items that might impact fire suppression strategy, tactics, and safety.
- Prior to the start of fire season, BLM and ODF personnel will meet to review the wilderness standards and practices used in wilderness rehabilitation.

- Knowledge and understanding of the standards and practices used in wilderness rehabilitation prior to initial attack can be beneficial in selecting and implementing suppression actions which will reduce the amount of rehabilitation needed.

- **Fire Season**

Fire Notification

- ODF will notify BLM of a fire occurring within or adjacent to the wilderness through the existing notification process.
- BLM will dispatch a Project Inspector/Resource Advisor (PI/RA) to all fires within or adjacent to the wilderness to ensure ODF receives guidance on resource issues and implementation of MIST.
- BLM will provide ODF the names and contact information for the PI/RA at the time of their dispatch.

Initial Action

- Preseason authorizations for use of tools, equipment, and activities are valid during the first 24 hours of the incident. A new authorization will be required after 24 hours and will be based on the specific strategy and tactics for that incident.
- In recognition of the need for urgency, ODF requests for authorization can be granted orally by the BLM Delegated Agency Administrator. Follow up documentation of the requests and authorizations will be made utilizing a mutually agreed upon written form (Figure C-2).
- BLM representative or PI/RA will remain available to ODF throughout the incident to provide prompt information regarding resources, issues, objectives, and maintain communications link to Delegated Official for approval of tools, equipment, or activities.
- All fire suppression activities in wilderness would use MIST unless a higher degree or level of fire suppression is required.
- Use of any motorized equipment, including heavy machinery such as bulldozers, would be considered for approval by the District Manager in cases where the fire is threatening human life, property, or wilderness characteristics.
- Use of retardant and/or foam must be approved by the District Manager; if retardant and/or foam is not approved, water may be dropped from retardant aircraft as ordered by the Incident Commander without additional authorization.

Extended Action and Long Term Incident

- BLM will assign Resource(s) Advisors, Agency Representative; issue a written Letter of Direction that provides the IMT with resource objectives to incorporate into planning and implementing fire suppression. Due to the added complexity of suppressing wilderness fires using the minimal tools, a close working relationship will be needed between ODF incident management and BLM representatives.
- BLM will designate a Lead Advisor who will be the point of contact in the event more than one Resource Advisor is assigned.
- Helibases and helispots, other than the pre-approved designated helispots, would be located outside of wilderness boundaries. When this is not feasible, the District Manager may approve sites within wilderness that require minimal clearing of natural vegetation.
- Staging areas and fire camps requiring motorized access would be located outside of wilderness unless authorized by the District Manager.
- Staging areas and fire camps that only require non-motorized access may be located in wilderness areas if authorized by the Wilderness Resource Advisor.

- Sling loading materials into or out of wilderness using a helicopter must be approved by the District Manager.
- Helicopters or other aircraft may be used for aerial reconnaissance work.
- Use of retardant and/or foam must be approved by the District Manager; if retardant and/or foam is not approved, water may be dropped from retardant aircraft as ordered by the Incident Commander without additional authorization.
- The strategy developed for controlling noxious weeds in the monument (CSNM ROD/RMP 2008, Appendix F) would be used. Suppression equipment would be inspected and washed to prevent the spread of noxious weeds. Wash-down sites would be recorded using a GPS unit, if possible, and reported to the Resource Advisor. Camps and other assembly points would not be located in noxious weed infestation areas.
- Leave No Trace principles would be used in wilderness areas. All evidence of human activity would be removed or rehabilitated to the maximum extent possible.

Post Fire and Season Reviews

As soon as possible after a wilderness fire an After Action Review (AAR) should be held to share the lessons learned and consider any improvements that can be made in procedures and operations.

- **Appendix D**

- **Rehabilitation of Wilderness Fire Suppression Activities**

The major goal of wildfire rehabilitation is to mitigate or eliminate environmental resource impacts caused by the fire suppression effort and rehabilitate the area to as natural conditions as possible. BLM policy emphasizes the need to rehabilitate areas disturbed during the fire suppression effort to as natural an appearance as possible.

This goal coincides with the intentions of the Wilderness Act, which states: “...wilderness is an area affected primarily by nature, with human activity substantially unnoticeable....” In the case of wildfire suppression, it is the human involvement that has the potential to be the damaging effect on the wilderness resource, even more so than the effects of the fire.

Major areas to consider in rehabilitation of fire suppression activities are firelines, helispots, camps, staging areas and any actions taken related to the fire suppression effort. The following are examples of the actions that may be used for the rehabilitation of fire suppression activities for each area or type of location.

- **Constructed Fireline Rehabilitation**

The following are examples of actions that may be utilized in rehabilitation of constructed firelines:

- After fire spread is secured, replace dug-out soil/duff; obliterate any berms and leave as natural appearing.
- Provide some means for drainage to prevent erosion on firelines or trails created on sloped areas, i.e., shadow-depth water bars, or natural material to act as sediment dams.
- Scatter some cut brush/limbs onto fireline or impacted areas so it blends with the natural appearing landscape.
- Scatter obvious, excess accumulations of cut limbs/seedlings/saplings into a more natural arrangement.
- If excessive amounts of cut vegetation exist, consider piling and burning at a later date.
- Flush cut stumps of felled trees and snags with the ground surface; scatter cut portion out of sight.
- Camouflage cut stumps in a manner that blends with surrounding natural landscape.
- Use a variety of means to camouflage cut faces of stumps and bolewood (rocks, dead woody material, fragments of stumps, bolewood and/or limbs, soil, and fallen/broken green branches).
- If need be, bring in some of the natural material you will use to camouflage cut faces of stumps and boles from adjacent untouched areas.
- Piece together cut sections of down logs to appear natural, if possible. Place soil or some existing debris over where the cut was made.
- Position cut logs where they will be least noticeable to wilderness visitors.
- If bolewood can be moved, place cut end adjacent to or underneath existing down material.

- For large size bolewood that cannot be moved, place a slant cut (45-60 degree angle) on the bottom side.
- Do not lop and scatter tops of cut trees. (Lop and scatter could create a harvest/pre-commercial thin appearance instead of a natural landscape).
- If there has been an excessive amount of bucking, limbing and topping, consider slinging rounds and tops from the site.
- Remove all plastic flagging and trash along the fireline.

- **Natural Barrier Firelines**

Natural or man-made breaks in vegetation, such as water ways, hiking trails, rocky outcrops, talus and scree slopes, and roads, are preferred when possible for use as barriers to contain a fire. These barriers may be effective as is (unimproved) or they may need “improvement.” It is the “improved” barriers that need rehabilitation due to the activities required to widen the barrier. The degree of improvement determines the amount of rehabilitation.

Water Ways

Limbs and logs thrown into a stream during line construction and constructed water impoundments can alter the water flow. Any alteration in water flow should be corrected.

- Remove all woody material (brush, branches and logs) that were thrown into the water during the fire.
- Remove dams, sumps and other human interventions.
- Retrieve flagging and remove all litter, tools, etc.

Hiking Trails

When hiking trails are employed as firelines they may have been widened by the cutting or limbing of trees that line the trail. The following are examples of actions that may be utilized in rehabilitation of hiking trail firelines:

- Flush cut conspicuous stumps and camouflage the ends with soil and vegetation.
- Place all cut limbs and seedlings alongside trail, near their source if possible, with the cut ends facing away from the trail.
- Camouflage or block entrances to access trails and switchback short cuts. Switchback shortcuts need to be rehabilitated according to their level of impact, and may require following the guidelines for firelines.
- Retrieve flagging and remove all litter, tools, etc.

- **Rocky Outcrops, Talus or Scree Slopes**

These natural firebreaks are rarely improved upon. If vegetation was removed, no rehabilitation to replace the vegetation is necessary. Most of the impact seen in these areas will be in the form of trenches for fire access trails.

- If necessary, restore slope contour by raking slope material back into fireline until flush.
- Retrieve flagging and remove all litter, tools, etc.

- **Fire Access Trails**

These are trails created by foot traffic along hose lines and firelines; accessing pump sites; and other areas of the fire. Treatments differ for access trails in burned areas versus vegetated areas.

1) Through Fire: Access trails that travel through the fire usually need attention in preventing further erosion and further use. The following are examples of actions that may be utilized in rehabilitation of access trails created through the fire area:

- Restore slope contour by raking in nearby fill to a level equal to adjacent soil level.
- Drag available burned logs and brush across the “trail” every 50 feet.
- If slope is greater than 25 degrees, drainage dips should be added every 20 feet, or where natural features on the land dictate them most useful, i.e., where they provide the most drainage (where the trail changes direction).
- Camouflage beginning of access trail so visitors will not be tempted to travel on it.

2) Through Vegetation: An access trail through vegetation is rehabilitated as if it were a fireline, but because the level of impact is not normally as severe; the amount of work required is less intensive. Usually, slope and soil loss are observed, as well as compaction of the soil. The degree of rehabilitation required is determined by the amount of impact observed.

- If soil is compacted, scarify the area lightly without killing any vegetation.
- Replace recoverable soil and rocks that were displaced during use of access trail, trying to keep soil horizons correct.
- Restore slope contour, compensating for settling.
- Scrape back litter.
- Drag available burned logs. Drag available burned logs and brush across the “trail.”
- If access trail is deeper than 4 inches and slope is very steep: consider following the rehabilitation standards for constructed fireline.

- ***Special Areas***

Special areas receive unusual, intermittent, unregulated, and/or extreme use. These special areas include: helispot sites, “coyote” camps, helispots, pump sites, spike camps, and staging areas. Although the extent of impact to these areas may vary, the same type of impact often occurs throughout.

Helispots

Helispot construction in Wilderness can cause a double impact—the impact of abrupt or unnatural appearing openings in a timber-vegetative covered landscape, and the impact resulting from cut-faces of tree boles and stumps. Many of the same type of impacts associated with fireline construction can occur during helispot construction and operation, therefore many of the techniques listed above under constructed firelines can be used. Some other potential actions include:

- If excessive amounts of cut vegetation exist, pile and arrange to be burned at later date, or consider slinging cut material from the site.
- Obliterate landing pad and leave in as natural a condition as possible: bury painted helispot markers, remove litter, clean up any area where oil or fuel spills occur, and break up compacted soil.

Camp Situations and Personal Conduct

- Scatter campfire site rocks and charcoal; cover charred fire ring rocks with soil if necessary.
- Scatter any cut limbs or saplings that may have occurred.
- Cover latrine sites.

- Remove camp/tent poles and stakes and scatter in nearby timbered area.
- Pick up litter and pack out as garbage.

Staging Areas, Etc.

In some wildfire situations, a fire camp, staging areas, drop-off points, and other miscellaneous constructed facilities are within the Wilderness. These all will be assessed for possible rehab needs, and measures taken accordingly to ensure the area is left in as natural appearing condition as possible.

Spike Camps

Groups of firefighters can stress the resource as they live and work out of spike camps for an extended period of time. Areas of possible impact include sleeping sites, mess area, first aid station, sanitation sites, equipment caches, and vehicle parking. At these specific spots and throughout the area, potential impacts include compacted soil, bare ground, litter, oil/fuel spills, disturbed slope as in leveled sleeping areas, human refuse/toilet paper, kitchen refuse (sump holes), campfire pits, cut seedlings and limbs, social trails between various living areas, and primitive constructions such as nails in trees, hooches, etc.

Coyote Camps

Coyote camps are temporary firefighter camps located throughout the fire. Although these camps are not used for any length of time, they can exhibit impacts which may need rehabilitation work. The main impacts include: litter, compacted soil, bare ground, leveled sleeping sites, human refuse/toilet paper, campfire pits, cut seedlings and limbed trees.

Pump Sites

The operation of a portable water pump impacts both the ground on which the pump is resting and the required water supply. Impacts may include: oil/fuel spills, water pollution, compacted soil, bare ground, dammed and altered streambeds, erosion from overflowing portable water tanks, and litter.

- ***Land Stewardship with Fire Suppression***

Suppression impacts and resource damage that may have a level of acceptance on non-wilderness lands may not conform to the “Limits of Acceptable Changes” for wilderness. The appreciation of the need of minimum impact and damage to wilderness resources should occur in initial actions to suppress fire and be incorporated in on-going decisions of suppression actions throughout the incident. The consequence will be a lessening in the need for extensive and costly rehabilitation actions.

DRAFT



*Soda Mountain Wilderness
Fire Suppression Information
Specific Action and Preparedness Plan
2012*



Oregon Gulch Fire 7/15/2011 Helicopter transport

Soda Mountain Wilderness

Bureau of Land Management Representative Signiture

_____ *Date* _____

Oregon Department of Forestry Representative Signiture

_____ *Date* _____

Compiled by: Greg Alexander ODF, Tom Murphy BLM

Revised: 3-12

Soda Mountain Wilderness
Fire Suppression Plan 2011

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Southwest Oregon District

This plan will be used for fire suppression in the Soda Mountain Wilderness Area.

The wilderness area contains nearly 24,100 acres and is within the 53,827 acres Cascade-Siskiyou National Monument. The wilderness lands are owned by the Bureau of Land Management, the lands within the Cascade-Siskiyou National Monument are owned by private individuals, timber companies, state government and the BLM.

Fire suppression in the Cascade-Siskiyou National Monument is status quo for the normal ODF fire suppression response. Meaning if a fire is on lands other than BLM immediate and aggressive fire suppression action will be taken with whatever means is necessary and prudent for the situation. On BLM lands, a BLM Resource Advisor will be notified of fires within the monument. Aggressive fire suppression actions could include whatever means is necessary and prudent for the situation, some special protection areas on BLM owned land are within the NM that may restrict some fire suppression actions, but they are all available if needed for fire suppression. Many roads have been closed, gated or decommissioned but may still be used for fire suppression with motorized equipment. **Opening up decommissioned roads, construction of new roads and using dozers for fire line construction within the Monument will need approval from a BLM resource advisor on BLM owned lands.**

Fire suppression in the Soda Mountain Wilderness Area is limited. All motorized equipment that is needed for fire suppression will need approval by the BLM before it is used within the wilderness. This includes at a minimum; fire engines, helicopters sling loads, saws, pumps, ATV's, dozers and retardant planes.

All roads that are within the wilderness will be blocked or decommissioned and not be available for motorized use. Roads within the wilderness will **not** be used for motorized equipment, i.e. Fire engines, dozers, ATV's etc. If there is a need for motorized equipment ODF will need to request and the request approved by BLM before these roads are used. It is possible that these roads will not be able to be used for motorized equipment.

There is a network of roads within the wilderness that have been in place for decades. These roads include the Schohiem, Lone Pine, Scotch Creek, Hutton Cr., Pilot Rock and many others. These roads may be available for access for hiking fire crews into fires. The roads have not been maintained for many years.

The Pacific Crest Trail runs through the north side of the National Monument as well as the Wilderness area. Another hiking trail starts on the Pilot Rock Road and goes to Pilot Rock. Trail systems that will be maintained are shown in Appendix H.

The California border is the south side of the Monument and wilderness area. There are roads coming up from California that will stop at the Monument, these roads are accessed through Hutton Creek, Scotch Creek and Camp Creek from the California side.

The Soda Mountain Wilderness area has elevations 2800' at the bottom of Salt Creek to 6000' near Soda Mountain. The Wilderness has a predominantly southern exposure.

The Wilderness is divided by two power line routes that run northwest to southeast from the end of the Soda Mountain Road to Copco Road to the east and into California to the south. The power lines separate the Wilderness by approximately ½ of a mile. There are some BLM and

Private Ownership lands between the Wilderness boundaries near the power lines. These BLM lands are within the Cascade-Siskiyou National Monument.

There are 3 Helicopter Landing Zones established within the Wilderness and these will be maintained in the future. There are 6 additional helicopter landing zone locations identified in the CSNM and SMW Map handbook. These 6 and any other helispots that are not yet identified could still be used for fire suppression if permission is requested and received from the BLM to use these areas; this includes felling trees and cutting brush to make helispots.

These landing zones have a good possibility of being used more now that there will no longer be fire engines allowed to drive on roads within the Wilderness.

There are several ponds within or near the Wilderness area; the water sources could or could not hold water for helicopters or fire crews.

See pages 8-10 for the spreadsheet with the locations of the helispots and water sources.

Fires will be dispatched with crews responding off of run cards. The dispatchers or protection supervisors will have to amend the initial attack response for fires within the wilderness since mechanized equipment is not permitted. Fires along the Wilderness boundary near a road may be accessible for hose lays from fire engines.

Since there are private lands near to the border of the Wilderness and BLM lands that are near but not in the Wilderness a full run card dispatch is necessary to ensure an effective initial attack response. If a fire is determined to be in the Wilderness after the initial attack dispatch has been ordered, the response will be determined by dispatch or protection supervisors with regards to Wilderness fire suppression and fire access in the Wilderness.

When a fire is a confirmed fire or a report of fire in the Wilderness and fire conditions warrant an initial attack effort, a recon aircraft may be ordered to ensure fire suppression actions are sufficient and to lead crews into the fire. If necessary a helicopter may be ordered to do recon or to transport crews or provide water drops on the fire. If helicopters, or low flying aircraft like retardant planes, are used in the Wilderness permission needs to be obtained from the BLM.

Permission to use power equipment within the Soda Mountain Wilderness needs to be obtained from the BLM. This includes chainsaws, portable pumps, helicopters, retardant, engines, dozers, ATV and any other mechanized equipment. A phone call to BLM with the request for what power equipment we want to use will be required. A quick turn around with permission to use most equipment should be granted, except for dozers and possibly driving vehicles and ATV's in the Wilderness.

Permission needs to be obtained from BLM for the use of retardant in the Wilderness. Water can be used in the Wilderness in place of retardant.

Access to the Wilderness area could include long hikes or helicopter transports. Some roads near the Wilderness within the Cascade-Siskiyou National Monument will remain open and these may be the starting points for hiking into the Wilderness to suppress fires. Helicopters may be used for access for firefighters. Some helispots are established and others may be used if necessary after BLM gives the approval.

If crews are transported into the Wilderness for fire suppression, the crews should be prepared to spend several days in the Wilderness. When the crews initially hike into the Wilderness or are helicopter transported into the Wilderness they need to be prepared to spend the first night and well into the next shift on the fire line. If the walk into the Wilderness is more than 3 hours, or the crews are transported by helicopter, the crews should plan on staying and

extended amount of time up to 3 nights on the fire if the fire warrants such effort. If the fire crews plan on staying three nights on the fire they may need to be supplied with sling loads from helicopters for their fire supplies. A list of initial attack supplies is listed on page 11 for up to 6 firefighters.

When a fire in the Wilderness is larger, or too difficult for the initial attack crews to suppress, larger crews may be ordered to assist with fire suppression. These crews will need to be hiked or moved with helicopters to helipots in the Wilderness. A spike camp will need to be set up in the Wilderness. This camp will need to have a manager to organize the ordering and delivery of supplies and equipment for the camp. The camp manager will work for the IC of the fire.

When initial attack crews are helicopter transported into the Wilderness the helicopter pilot can brief and organize the loading, transport of supplies and personnel to the helicopter landing zones.

When the fire requires crews beyond initial attack a helicopter manager may be needed at both landing zones to insure safety of firefighters as they board and leave the aircraft.

If permission is given to ODF for sling load use in the Wilderness, the cargo nets should be able to be unhooked by initial attack crews who have limited training. If a fire goes beyond initial attack a helicopter manager will also have to manage the loading and off loading of supplies at both landing zones.

Fires that are determined to be within the Wilderness will have an initial attack effort of 3 engines, meaning 6 firefighters will respond to the fire either by hiking or aircraft. (This is subjective based on the fire in the Wilderness is the only fire in the unit at the time) If more firefighters are needed they may be ordered. If less is needed then the initial dispatch of 6 firefighters will be adjusted. Planning for replacement crews needs to be arranged to get any more than the 6 firefighters off the fire so they can resume initial attack duties. If the fire is contained quickly the release of fire fighters that are not necessary for mop up or rehab should be done so they are again available for initial attack. Crews on the fire in the Wilderness may have to plan on staying on the fire until it is completely out which may take up to several nights since access into and out of the Wilderness could be difficult.

When initial attack fire crews are sent into the Wilderness, back up crews will need to be ordered to insure the unit will be able to maintain successful initial attack capabilities by filling the holes that now have no initial attack capabilities because the engine crews are committed in the Wilderness.

Soda Mountain Wilderness

Access point: Hutton Creek road system in California

Part of the southwest end of the Soda Mountain Wilderness is accessible by road from California. The road is a privately owned. Permission will need to be obtained from the landowner to use this system if we feel a need to get our fire folks to the Wilderness boundary through this road system.

The landowner would prefer if we did not need to use his roads to assess the Wilderness. If at a last resort we feel we need to use his road system a call to him will need to be made to get his permission.

Just for clarification the Oregon Department of Forestry has no jurisdiction on lands not within Oregon. Therefore our normal initial attack rights of trespass would not apply to lands in

California. The same goes for use of water out of private lakes and ponds in California, we probably need to try to get permission, or at least pursue permission, from the landowner as we are using the water, Cal-Fire may be able to assist us with road access and permission for water use.

Landowner: Steve DeClerk 530-842-4827, 530-226-2800

Approximate location of access points to Oregon:

41s 2E 14 NWNE 41S 2E 15 NWNW

Helicopter Landing Zones in Roadless Area

Site Name	Status Date	Latitude			Longitude			Twp	Rng	Sec.	Legal	Status	
*Upper Dutch West	Aug. 2007	42	2	40.28	-	122	30	10.56	40s	3e	31	NESE	non-op
Upper Dutch	Aug. 2007	42	2	40.41	-	122	29	27.70	40s	3e	32	NWSE	non-op
*Pilot-Schoheim Jct	Aug. 2007	42	1	13.46	-	122	34	38.64	41s	2e	10	SWNW	operational
East Fork Hutton	Aug. 2007	42	1	18.98	-	122	33	3.807	41s	2e	11	NWNE	operational
Upper Slide Creek	Aug. 2007	42	0	35.58	-	122	32	23.54	41s	2e	12	SWSW	operational
Lower Camp Creek	Aug. 2007	42	1	37.34	-	122	27	30.80	41s	3e	3	SESW	operational
Middle Camp Creek	Aug. 2007	42	1	50.72	-	122	27	42.53	41s	3e	3	NWSW	operational
Upper Camp Creek	Aug. 2007	42	2	19.08	-	122	27	7.240	41s	3e	3	NWNE	operational
Lone Pine North	Aug. 2007	42	2	6.441	-	122	30	31.24	41s	3e	6	SENE	operational
Middle Scotch	Aug. 2007	42	1	38.23	-	122	30	40.81	41s	3e	6	SWSE	non-op
* Schoheim	Aug. 2007	42	1	48.15	-	122	30	58.87	41s	3e	6	NESW	non-op
Lower Scotch Ck	Aug. 2007	42	0	51.43	-	122	29	46.45	41s	3e	8	NESW	operational
Lone Pine South	Aug. 2007	42	0	59.87	-	122	28	58.91	41s	3e	9	NWSW	operational

- Bold * indicates the three helispots that will be permanently

Water Access Site Inventory

Site Name	Status Date	Latitude			Longitude			Twp	Rng	Sec.	Legal	Status	
Gov. Camp Spring	July 2005	42	9	16.3	-	122	24	34.927	39s	3e	25	NENE	Spring near old CCC foundations
Keene Ck Reservoir	July 2005	42	7	48.7	-	122	28	42.05	39s	3e	33	SESW	(air photo) 1800'x200'x20' +d PC/Helidip
Box R South Pond	July 2005	42	7	29.7	-	122	23	8.864	39s	4e	31	SWSW	(air photo) 110'x75'x?d PC/Helidip
Coker Pond	July 2005	42	7	49.1	-	122	24	2.669	39s	4e	31	SWSW	(air photo) 40'x45'c?d PC/Helidip
Box R East Pond	July 2005	42	7	46.2	-	122	22	-20.7	39s	4e	32	SWSE	(air photo) 100'x350'x?d PC/Helidip

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Box R North Pond	July 2005	42	7	45.1	-	122	23	3.288	39s	4e	32	SWSW	(air photo) 200'x375'x?d PC/Helidip
Joe's Rock Pond	July 2005	42	3	48.2	-	122	31	52.93	40s	2e	25	SWNE	(air photo) 30'x20'x?d PC/Helidip
Spring Creek Pond	July 2005	42	4	1.84	-	122	33	46.12	40s	2e	27	NENE	Unconfirmed (air photo) PC/ Helidip 100'x200'x?d
Radio Hill Dip 1	July 2005	42	2	59	-	122	34	12.71	40s	2e	34	SWNE	(air photo) 85'x30'x?d PC/Helidip
Radio Hill Dip 2	July 2005	42	3	3.31	-	122	34	16.69	40s	2e	34	SWNE	(air photo) 100'x60'x?d PC/Helidip
Howard Prairie Canal	July 2007	42	7	27.3	-	122	25	47.42	40s	3e	2	NENE	circles s. of chinquipin mtn on the 4400' contour
Dist. 5 Storage Tank	July 2005	42	6	57.7	-	122	29	55.902	40s	3e	5	SWSW	steel tank 10K gal
Linda Cook's	July 2005	42	7	26.5	-	122	29	29.73	40s	3e	5	NWNE	(air photo) 75'x150'x?D PD/Helidip
Schoolhouse Ck Pond	July 2005	42	7	11.5	-	122	29	46.45	40s	3e	5	NESW	(air photo) 80'x50'x?d PC/Helidip
Kieleys Pond	July 2005	42	7	5.64	-	122	31	20.518	40s	3e	6	NWSW	(air photo) 85' x 20'
Hobart Lake	July 2005	42	5	52.6	-	122	28	50.48	40s	3e	9	SWSW	(air photo) 1000'x500'x20'd PC/Helidip
Middle Parsnip Lake	July 2005	42	6	25.2	-	122	27	1.939	40s	3e	10	SWNE	(air photo) 100'x250'x??d PC/Helidip
Keen Ck Bridge	July 2007	42	6	16.8	-	122	24	46.99	40s	3e	12	NWSE	Perennial stream. Pump chance/helidip near bridge
Thompson Pond	July 2005	42	6	23.5	-	122	24	59.38	40s	3e	12	SENW	(air photo) PC/Helidip 200'x30'x? deep

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Site Name	Status Date	Latitude			Longitude			Twp	Rng	Sec.	Legal	Status
Lincoln Ck Pond	July 2007	42	5	30.9	-122	25	6.143	40s	3e	13	SENW	40'x20' PC. Choked with cattails
Mill Creek	July 2005	42	5	43.9	-122	25	41.54	40s	3e	14	NENE	(air photo) 100'x100'x?d PC/Helidip
Baldy Creek Pond	July 2005	42	5	19.8	-122	31	2.841	40s	3e	18	NESW	Field notes 7/20/05?x?x?
Soda Mtn Jeep Rd Dip	July 2005	42	4	9.44	-122	28	59.16	40s	3e	21	SWSW	Field notes (aerial) 100'x60'x?d
Upper Lincoln Ck Pond	July 2005	42	4	32.1	-122	25	37.31	40s	3e	23	NESE	(air photo) PC/Helidip 60'x40'x? deep
Soda Mtn Porta Tank	July 2005	42	4	4.1	-122	24	51.47	40s	3e	25	NWNE	field notes ?x?x?
Bowman Pond	July 2007	42	3	13.9	-122	26	4.205	40s	3e	26	SWSE	50'x100'x10+d PC/Helidip
Skookum East	July 2007	42	3	23.1	-122	25	33.33	40s	3e	26	SESE	100'x30'x2 deep. PC/Helidip
Upper Skookum Spring	July 2007	42	3	51.6	-122	27	40.69	40s	3e	27	SWNW	10'x20'3-4' deep PC/Helidip marginal
Camp Creek Tank	July 2007	42	3	38.9	-122	28	4.671	40s	3e	28	NESE	Steel tank 4k gal PC/Helidip
Soda Mtn Dip	July 2005	42	3	55.7	-122	29	6.908	40s	3e	29	NENE	(air photo) 20'x40'x?d PC/Helidip
Belle Pond	July 2005	42	6	57.6	-122	23	45.967	40s	4e	6	SWSE	(air photo) 60'x45'x?d PC/Helidip
Lincoln Millpond	July 2005	42	6	29.4	-122	24	9.700	40s	4e	7	SWNW	(air photo) 700x200x?d PC/Helidip
Randcore	July 2007	42	4	27.5	-122	24	15.82	40s	4e	19	NWSW	36'x24'x4-5' deep. PC/Helidip-LL
Rosebud Helipad Dip	July 2005	42	4	4.1	-122	22	47.13	40s	4e	29	NENW	(air photo) PC/Helidip 30'x50'x? deep
Andrew Pond	July 2007	42	3	11.1	-122	24	0.911	40s	4e	31	NENE	40'x20'6-8'deep. PC/Helidip
Deadhorse Pond	July 2007	42	2	42.2	-122	23	45.86	40s	4e	31	NWSE	30'x100'x3-5'deep. PC/Helidip
Pilot Rock Pond	July 2005	42	1	46.4	-122	34	11.14	41s	2e	3	NWSE	(air photo) 60'x40'x?d PC/Helidip
Pilot Rock Dip	July 2005	42	1	24.4	-122	34	23.36	41s	2e	10	NENW	(air photo) 60'x40'x?d PC/Helidip
Troutmans Pond	July 2005	42	1	58.2	-122	19	-18.8	41s	4e	2	SENW	(air photo) 375'x100'x?d PC/Helidip
Agate Flat	July 2005	42	0	55.4	-122	23	32.4	41s	4e	7	NESE	Unconfirmed (air photo) PC/ Helidip 150'x100'x?
Wards North Pond	July 2005	42	1	24.8	-122	20	-6.67	41s	4e	10	NWNE	(air photo) 200'x200'x?d PC/Helidip

Wards East Pond	July 2005		42	0	42.4		-	-	-13.7		41s	4e	11	SESW	(air photo) 150'x400"x?d PC/Helidip
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Wilderness Sling Loads

<input type="checkbox"/>	2 ea	cargo nets
<input type="checkbox"/>	2 ea	net swivels

Standard order for sling load for spike camp in wilderness (6 person camp for 3 days)

<input type="checkbox"/>	6 ea	Flash lights
<input type="checkbox"/>	5 case	MRE's
<input type="checkbox"/>	10 ea	5 Gallon Drinking Water
<input type="checkbox"/>	6 ea	Quart Canteens
<input type="checkbox"/>	6 ea	Sleeping Bags
<input type="checkbox"/>	12 ea	Sleeping Pads
<input type="checkbox"/>	1 ea	First Aid Kit (10 Person)
<input type="checkbox"/>	6 ea	Toilet Paper
<input type="checkbox"/>	12 ea	Ear Plugs
<input type="checkbox"/>	12 bricks	AA batteries
<input type="checkbox"/>	2 bricks	D batteries
<input type="checkbox"/>	2 ea	Clam Shells
<input type="checkbox"/>	4 case	Drinking water
<input type="checkbox"/>	1 box	plastic trash bags
<input type="checkbox"/>	100 feet	parachute cord
<input type="checkbox"/>	2 ea	12'x14' tarps

These items need to be confirmed with IC before they are ordered

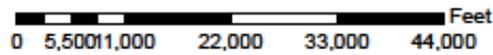
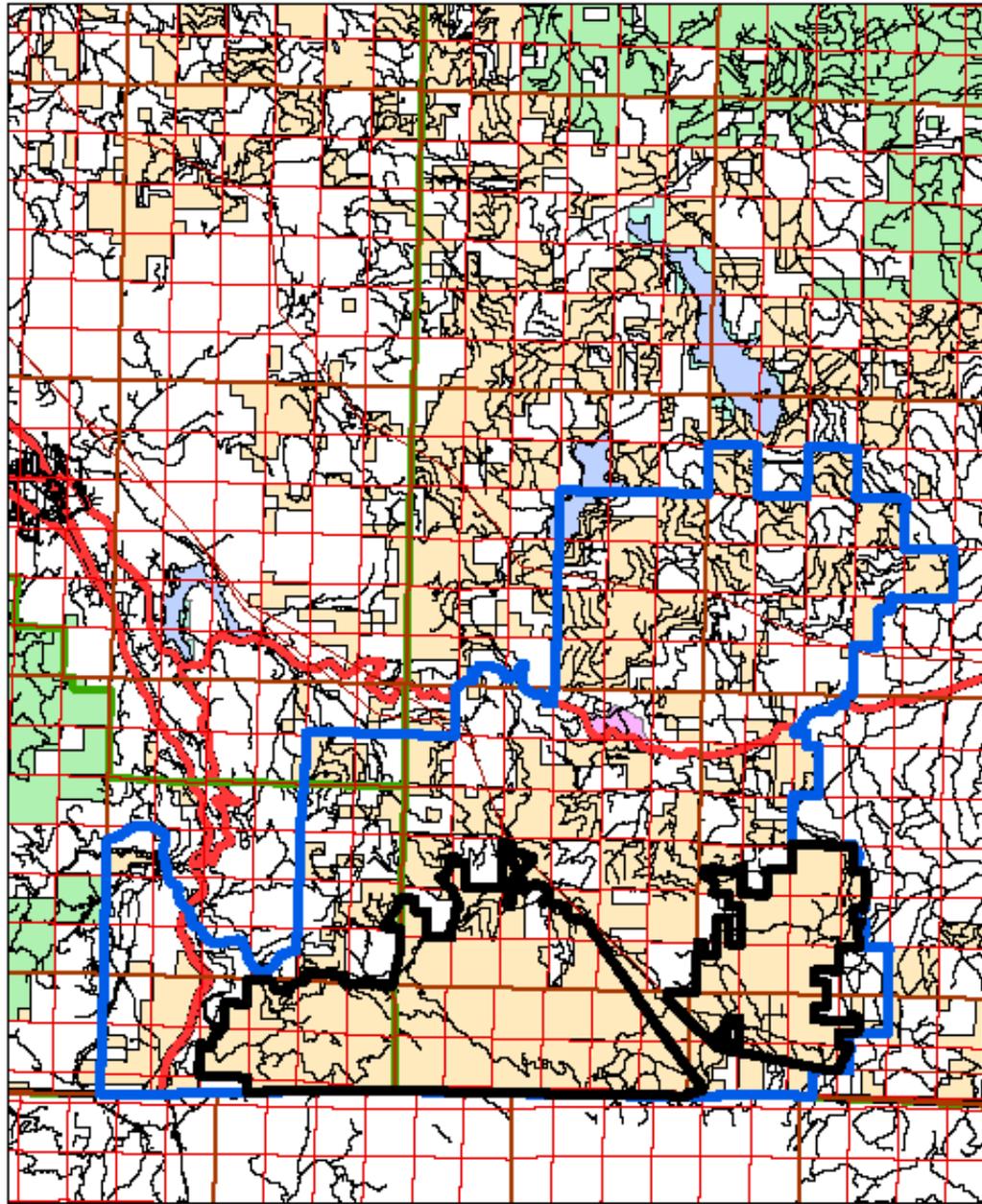
<input type="checkbox"/>	Fedco's
<input type="checkbox"/>	Helicopter water bag with kit
<input type="checkbox"/>	Free Standing Fold-a-tank (500 gallon) w kit 3/4"
<input type="checkbox"/>	Shovel
<input type="checkbox"/>	Pulaskie
<input type="checkbox"/>	Saw Gas/Oil
<input type="checkbox"/>	Portable Pump w kit (Including berm)
<input type="checkbox"/>	Pump/Chain saw fuel
<input type="checkbox"/>	Fire hose 3/4" and fittings
<input type="checkbox"/>	Fire hose 1" and fittings
<input type="checkbox"/>	Fire hose 1 1/2" and fittings
<input type="checkbox"/>	IC Kit *

Possible loading sites outside of the wilderness

			122 22	
Pinhurst Airport	40s 4e 8		56	42 6 38
			122 36	
Old Highway 99 gravel pit	40s 2e 33	swnw	5	42 2 52
Ashland Airport	39s 1e 12	sww	122 39	42 11

- * IC Kit = 1 box ink pens, 1 box pencils, 1 box magic markers, signs (DIVS, Drop point, etc.) 4 tablets, 10 wilderness maps, 10 unit logs, 10 blank shift plans, 12 roles flagging

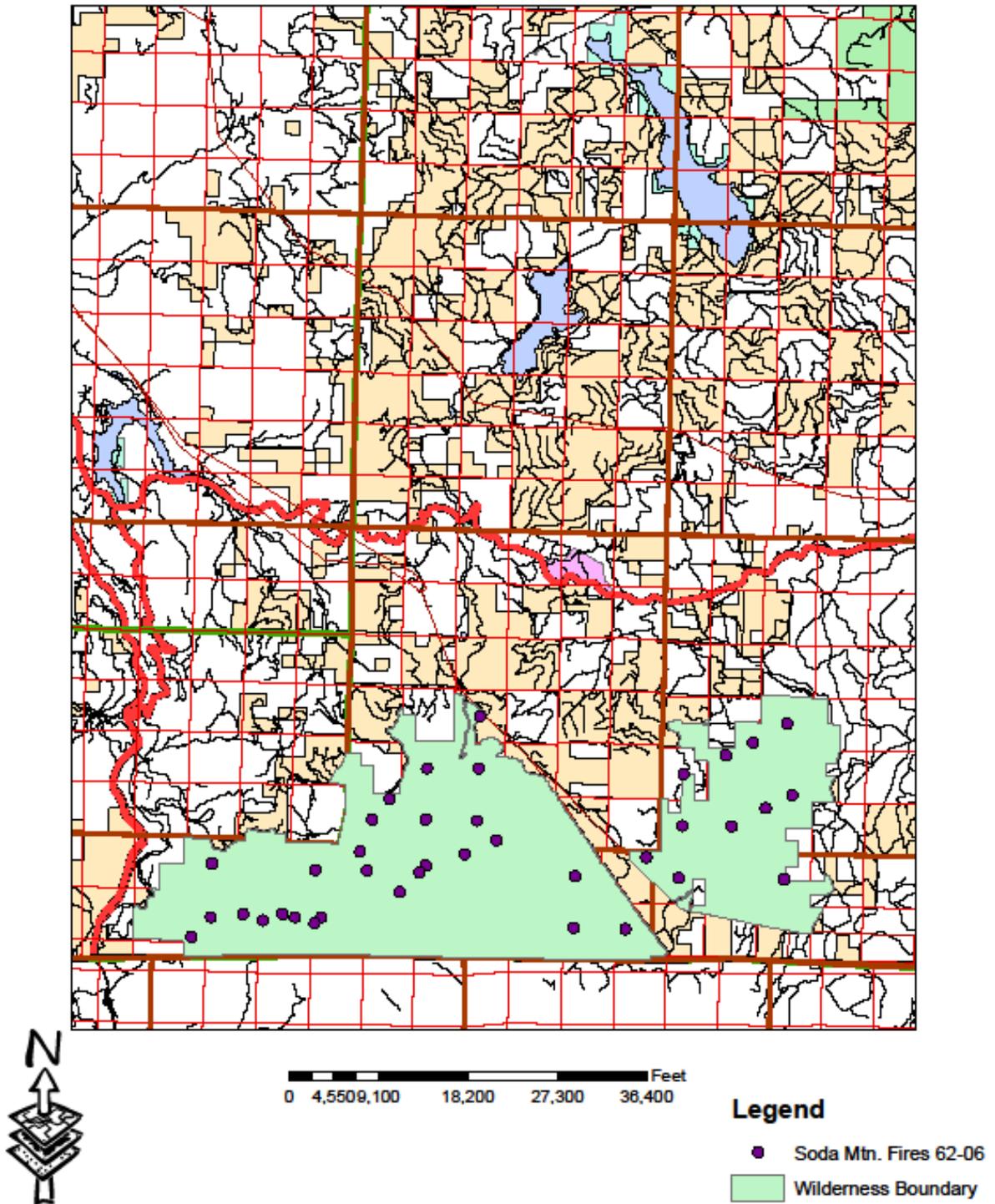
Cascade-Siskiyou National Monument



Legend

-  Wilderness Boundary
-  Casc/Sisk National Monument

Soda Mtn. Wilderness Fires 1962-2006



Appendix A

**Soda Mountain Wilderness Preseason Authorization
For Motorized Equipment & Activities During
Initial Attack Fire Suppression Operations**

1 The Oregon Department of Forestry is hereby authorized the use of the following during the first 24 hours of initial attack suppression operations within the boundary of the Soda Mountain Wild

Small Equipment

Large Equipment

- 2 Chain Saws (felling of burning trees for fire fighter safety)
- 3 Hose lays from engines (engines outside of wilderness)
- 4 Chain Saws (Fire line construction, felling danger/burning trees)
- 5 Portable Pumps (hoselays, water bags)
- 6

- 14
- 15
- 16
- 17

Aircraft

Miscellaneous

- 7 Helicopter for crew transport loading and unloading
- 8 Fixed-wing aerial delivery of water
- 9 Helicopter Water Drops
- 10 Helicopter water drops
- 11 Helicopter sling loads (waterbags, supplies & equipment)

- 18 Reconnaissance flights below 500 ft. AGL
- 19
- 20
- 21
- 22

- 12 Helicopter use of water from the wilderness
(from 8 ponds located within the wilderness)
- 13
- 23



ODF Dispatch Phone #664-1213
BLM Dispatch Phone #618-2510



- 24 Contact Names & Phone Numbers:
 Field Manager: John Gerritsma 541-944-7901 (cell) 541-664-1139 (home)
 Assistant Monument/Wilderness Manager: Howard Hunter 541-601-1876 (cell) 541-482-2925 (home)
 Resource Advisor: Kathy Minor 541-973-5742 9(cell) 541-261-6621 (cell)
 Assistant Resource Advisor: Armand Rebischke 541-944-6621 (cell), 541-482-2141 (home)
 Assistant Resource Advisor: Jennifer Smith 541-840-2538 (cell), 541-826-7208 (home)
 Assistant Resource Advisor: Ted Hass 541-941-1743 (cell), 541-779-0943 (home)
 Assistant Resource Advisor: Chris Volpe 541-621-0862 (cell), 541-618-2462 (work)

- 25 BLM Approval by: /s/ **John Gerritsma** (see signed copy on file for signature) 10-May-11
 Approving Official Title: Ashland Resource Area Field Manager



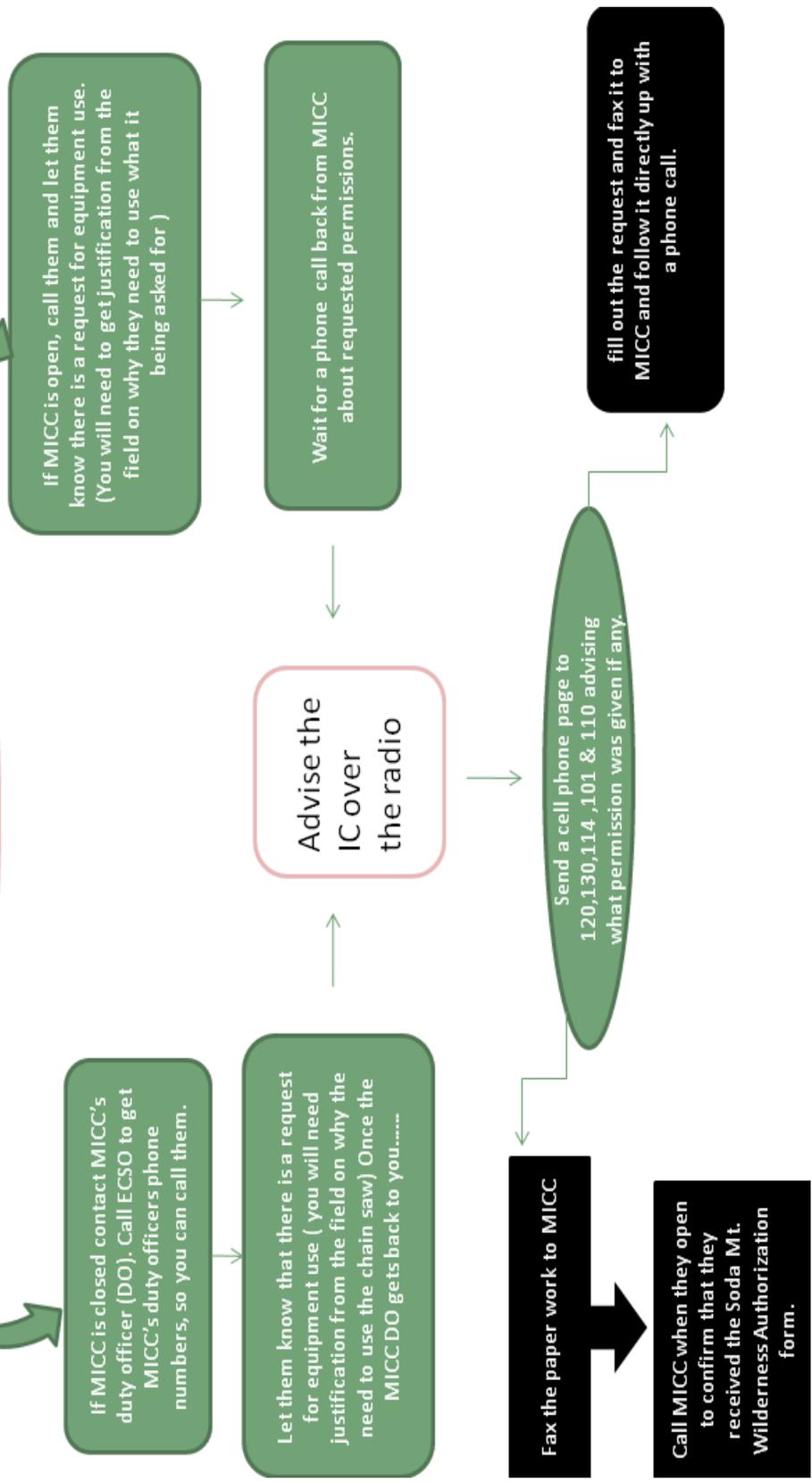
ODF Dispatch Phone #664-1213
BLM Dispatch Phone #618-2510



Appendix B		Soda Mountain Wilderness Siskiyou Cascade National Monument Fire Suppression Summary			Landowner
		Allowed	Pre-Season Authorization	Not allowed until authorized	
Chain Saws	X				ODF Protection (Private, State, BLM, etc.)
For FF safety felling burning trees is pre-authorized.	X			xdm	BLM Cascade-Siskiyou National Monument BLM Soda Mountain Wilderness
Portable Pumps	X				ODF Protection (Private, State, BLM, etc.)
	X			xdm	BLM Cascade-Siskiyou National Monument BLM Soda Mountain Wilderness
Fire Engines	X				ODF Protection (Private, State, BLM, etc.)
	X			xdm	BLM Cascade-Siskiyou National Monument BLM Soda Mountain Wilderness
Dozers	X				ODF Protection (Private, State, BLM, etc.)
			X		BLM Cascade-Siskiyou National Monument
				xdm	BLM Soda Mountain Wilderness
Retardant	X				ODF Protection (Private, State, BLM, etc.)
Water in retardant plane pre-authorized	X			xdm	BLM Cascade-Siskiyou National Monument BLM Soda Mountain Wilderness
Helicopter	X				ODF Protection (Private, State, BLM, etc.)
dip sites, water drops, sling loads, crew transport	X	X			BLM Cascade-Siskiyou National Monument BLM Soda Mountain Wilderness
Recon Flights	X				ODF Protection (Private, State, BLM, etc.)
below 500' fixed wing, helicopter	X	X			BLM Cascade-Siskiyou National Monument BLM Soda Mountain Wilderness
xdm = BLM District Manager Authorization, Field Manager or their authorized representative					
Hoselays from engines outside of wilderness are preauthorized					
Use of water from wilderness ponds is pre-authorized					
Chain Saw (felling of burning trees for firefighter safety is pre-authorized)					
Fixed-wing aerial delivery of water is pre-authorized					
Wilderness Pre-authorizations are good for only 24 hours. Authorization then based on specific fire conditions and needs.					

Soda Mountain Wilderness

If you get a request for the use of equipment that is not pre-authorized i.e. chainsaws, portable pumps or retardant



Appendix C

Appendix D

ODF Radio Frequencies

Name	Receive	RX Tone	Transmit	TX Tone	Location	Use
Flounce	151.175N	179.9	159.4125 N	173.8	North Jax	Dispatch
Soda	151.175N	179.9	159.4125 N	151.4	South Jax	“
Roxy Ann	151.175N	179.9	159.4125 N	179.9	Central Jax	“
Tallowbox	151.175N	179.9	159.4125 N	131.8	Applegate	“
Medford Dir	151.175N	179.9	151.175N	179.9	District	Unit-to-unit
Red Net	151.340N	156.7	151.340N	156.7	Statewide	Tactical
White Net	151.310N	156.7	151.310N	156.7	Statewide	Air to Ground
ODF NICS	159.240N	156.7	159.240N	156.7	Statewide	Tactical
Blue Net	159.2625N	156.7	159.2625 N	156.7	Statewide	Tactical/Seco ndary Air to Gnd.

Appendix E

Fire Season 2012 Soda Mountain Wilderness Specific Action and Preparedness Plan

Situation: A management plan for the Soda Mountain Wilderness has been completed and is under review. Final approval date is uncertain at this time (March 16, 2012). Therefore, although this Action and Preparedness Plan reflects all decisions contained in the SMW Plan under review, this must serve as interim direction and guidance until the plan is finalized, approved and signed into effect. This interim direction will ensure BLM policy for the management of wilderness is followed; and that ODF may complete their responsibilities for wildland fire prevention, detection, and suppression activities.

Purpose: Contained herein are the objectives, organizational guidance, operational procedures and plan of action for suppression activities within the Soda Mountain Wilderness for 2012 fire season.

Guidance & Principles: The following are the key direction and guidance from the BLM Wilderness Management Manual that will be the basis for fire protection and suppression actions; and the objectives of the ODF fire protection program:

BLM 8568 Manual Direction

.15C Control of Fires, Insects, and diseases. Where fire, insects, and diseases threaten human life, property, or high-value resources on adjacent nonwilderness lands, or where they would cause unacceptable change to the wilderness resource, measures may be taken as necessary to control them.

.13 Minimum Tool. Tools, equipment, or structures may be used for management when they are the minimum necessary for protection of the wilderness resources or when necessary in emergency situations for the health and safety of the visitor. Management must use the minimum tool, equipment, or structure necessary to successfully, safely, and economically accomplish the objective. The chosen tool, equipment, or structure should be the one that least degrades wilderness values temporarily or permanently.

A. Acceptable Tools. Acceptable tools, equipment, and structures may include but are not limited to; fire towers, patrol cabins, pit toilets, temporary roads, spraying equipment, hand tools, firefighting equipment caches, fencing, and controlled burning. In special or emergency cases involving the health and safety of wilderness visitors, or the protection of wilderness values, aircrafts, motorboats and motorized vehicles may be used.

ODF 2012 Fire Action Plan

The objective of the Southwest Oregon District fire protection program is:

- Conduct all fire suppression activities in a manner that protects the safety of firefighters and citizens.
- To establish and maintain an effective system for the discovery and suppression of wildfire.
- To minimize the cost of suppression and the damage to the forest and watershed environment caused by wildfire.

- To provide for fire discovery, reporting and initial attack capability that will control 94% of all wildfires at Class “B” size or smaller (10 acres or under).
- To conduct fire suppression activities in such a way as to minimize the damage to the site that may be caused by such activities.

Fire Suppression Guidelines

Preseason Preparedness

Prior Authorization:

- BLM will consider the forecasted fire danger, potential seasonal outlook, the late spring fuel conditions, and projected fuel and weather conditions in the wilderness area to determine which tools, equipment, or activities will have preseason authorization.
- BLM will determine which tools, equipment, or activities ODF will be pre-authorized for use in initial attack prior to actual fire occurrence. Preseason knowledge of the available tools, equipment, and activities will allow ODF the basis to prepare and train for wilderness minimum impact suppression tactics (MIST).
- BLM will provide ODF with a written authorization (Attachment A - Preseason Authorization for Motorized Equipment & Activities), signed by the delegated Agency Administrator, typically the Field Manger, which will include the specific tools, equipment, and activities along with any instructions associated with their use, and the names and contact information for BLM employees associated with the wilderness management.
- Annually ODF will determine the services and resources they will provide for the protection of the wilderness area, along with a cost estimate. These will be included in the annual Extreme-Risk Mitigation Plan.
- BLM will annually update ODF on any new or changed conditions, issues or items that might impact fire suppression strategy, tactics, and safety.
- Prior to the start of fires season, BLM and ODF personnel will meet to review the wilderness standards and practices used in wilderness rehabilitation.
- Knowledge and understanding of the standards and practices used in wilderness rehabilitation prior to initial attack can be beneficial in selecting and implementing suppression actions which will reduce the amount of rehabilitation needed and minimize costs.

Fire Season

Fire Notification

- ODF will notify BLM of a fire occurring within or adjacent to the wilderness through the existing notification process.
- BLM will dispatch a Project Inspector/Resource Advisor (PI/RA) to all fires within or adjacent to the wilderness to ensure ODF receives guidance on resource issues and implementation of MIST.
- BLM will provide ODF the names and contact information for the PI/RA at the time of their dispatch.

Initial Action

- Preseason authorizations for use of tools, equipment, and activities are valid during the first 24 hours of the incident. A new authorization will be required after 24 hours and will be based on the specific strategy and tactics for that incident.
- In recognition of the need for urgency, ODF requests for authorization can be granted orally by the BLM Delegated Agency Administrator. Follow up documentation of the requests and authorizations will be made utilizing a mutually agreed upon written form (Attachment B - Initial Attack Authorization for Motorized Equipment & Activities).
- BLM representative or PI/RA will remain available to ODF throughout the incident to provide prompt information regarding resources, issues, objectives, and maintain communications link to Delegated Official for approval of tools, equipment, or activities.
- All fire suppression activities in wilderness would use MIST unless a higher degree or level of fire suppression is required.
- Use of any motorized equipment, including heavy machinery such as bulldozers, would be considered for approval by the District Manager in cases where the fire is threatening human life, property, or wilderness characteristics.
- Use of retardant and/or foam must be approved by the District Manager; if retardant and/or foam is not approved, water may be dropped from retardant aircraft as ordered by the Incident Commander without additional authorization.

Extended Action and Long Term Incident

- BLM will assign Resource(s) Advisors, Agency Representative; issue a written Letter of Direction that provides the IMT with resource objectives to incorporate into planning and implementing fire suppression. Due to the added complexity of suppressing wilderness fires using the minimal tools, a close working relationship will be needed between ODF incident management and BLM representatives.
- BLM will designate a Lead Advisor who will be the point of contact in the event more than one Resource Advisor is assigned.
- Helibases and helispots, other than the pre-approved designated helispots, would be located outside of wilderness boundaries. When this is not feasible, the District Manager may approve sites within wilderness that require minimal clearing of natural vegetation.
- Staging areas and fire camps requiring motorized access would be located outside of wilderness unless authorized by the District Manager.
- Staging areas and fire camps that only require non-motorized access may be located in wilderness areas if authorized by the Contracting Officers Representative (COR).
- Sling loading materials into or out of wilderness using a helicopter must be approved by the District Manager.
- Helicopters or other aircraft may be used for aerial reconnaissance work.
- Use of retardant and/or foam must be approved by the District Manager; if retardant and/or foam is not approved, water may be dropped from retardant aircraft as ordered by the Incident Commander without additional authorization.

- The Medford District Noxious Weed Prevention Plan will be utilized when it is determined by the BLM that noxious weed prevention is an issue for a given fire's location. The Plan identifies best management practices to be utilized to prevent the spread of noxious weeds. Suppression equipment would be inspected and washed to prevent the spread of noxious weeds. Wash-down sites would be recorded using a GPS unit, if possible, and reported to the Resource Advisor. Camps and other assembly points would not be located in noxious weed infestation areas.
- Leave No Trace principles would be used in wilderness areas. All evidence of human activity would be removed or rehabilitated to the maximum extent possible.

Post Fire & Season Reviews

As soon as possible after a wilderness fire an After Action Review should be held to share the lessons learned and consider any improvements that can be made in procedures and operations.

Appendix F

Minimum Impact Suppression Tactics Implementation Guidelines

Fire Lining Phase

- Select procedures, tools, and equipment that least impact the environment.
- Give serious consideration to the use of water as a firelining tactic.
- If there is a risk that hose coming direct from a local unit's cache is contaminated with noxious weed seeds, order fresh hose from the regional cache.
- Resource Advisors, Operations Chief, and Logistics Chief should be cognizant of any equipment that is being moved from a non-wilderness fire to a wilderness fire and make attempts to clean equipment of noxious weed seeds prior to it being used in the wilderness.
- In light fuels consider:
 - Cold-trail line. Constantly recheck.
 - Allowing fire to burn to natural barriers.
 - Burn out and the use of a "gunny" sack or swatter.
 - If constructed fireline is necessary, use minimum width and depth to check fire spread.
- In medium and heavy fuels consider:
 - Use of natural barriers and cold-trailing.
 - Cooling with dirt and water and cold-trailing.
 - If constructed fireline is necessary, use minimum width and depth to check fire spread.
 - Minimize bucking to establish fireline. Preferably move or roll material out of the intended constructed fireline area. If moving or rolling is not possible, or the down log is already on fire, build line around the log and let it be consumed.

- In aerial fuels, brush, trees, and snags:
 - Minimize cutting of trees and snags.
 - Live trees should not be cut unless it is determined they will cause fire spread across the fireline or seriously endanger workers. If tree cutting occurs, cut the stumps flush with the ground and camouflage the cut surface with soil or brush.
 - Scrape around tree bases near fireline if hot and likely to cause fire spread.
 - Identify hazard trees with an observer, flagging, and/or glow-sticks.
- When using indirect attack:
 - Do not fall snags outside the constructed fireline, unless they are an obvious safety hazard to crews working in the vicinity.
 - On the intended burn-out side of the line, fall only those snags that would reach the fireline should they burn and fall over. Consider alternative means to falling, i.e.: fireline explosives or bucket drops.
- - Review consideration listed above for aerial fuels, brush, trees, and snags. Minimize disturbance to land in preparing bedding and campfire sites. Do not clear vegetation, trench, or excavate a flat spot to create bedding sites.
- Use established latrines where provided. If latrines are not available use the "cat-hole" method of disposing of human waste. Toilet sites should be located a minimum of 200 feet from water sources. Holes should be dug 6-8 inches deep.
- If a campfire is built for warmth in the evening, build either a pit or mound fire. A fire shelter placed beneath the coals provides extra protection for the soil
- Use dead and down firewood. Use small diameter wood that burns down more cleanly. Don't burn plastics or aluminum - pack it out with the rest of the camp garbage.
- If a designated personal washing area is not provided, carry water and bathe away from lakes and streams. Do not introduce soap, shampoo, or other personal grooming chemicals into waterways.
- Do not use nails in trees.
- Constantly evaluate the impacts that will occur, both short and long term.

Helispot Construction

- Whenever possible, locate helibases in weed free areas, to prevent the transport of noxious weeds into wilderness.
- When planning for helispots, determine the primary function of each helispot, i.e.: crew shuttle, logistical support, or both.
- If a helispot is only needed for logistical support to deliver and retrieve supplies or gear, consider using a long line remote hook in lieu of constructing a helispot.
- If a helispot is needed for crew shuttle, consider the minimum size helicopter that could do the job, if you have an option, and still meet suppression objectives.
- Use natural openings as much as possible. If some tree falling or cribbing is necessary, avoid high visitor use locations unless the modifications can be rehabilitated to be generally unnoticeable. Feather the opening so that it appears more natural looking.

- Perform an aerial reconnaissance of the fire area and select potential helispots. In determining helispot locations, involve, at a minimum, the Air Operations Manager, responsible land manager or Resource Advisor, and the Helitack Foreman. Consider drawing a sketch and discuss which trees need to be cut to ensure a safe operation for the size of the helicopter deemed necessary or available.
- If a high level of resource impact is anticipated from a proposed helispot, evaluate carefully whether it is absolutely necessary and if there isn't an alternative outside Wilderness.
- Whenever possible, the resource advisor should observe the construction of a helispot.

Mop-up Phase

- Use gravity socks in streams and/or a combination of water blivits and fold-a-tanks to minimize impacts to streams.
- Do not bring in any non-native materials to be used for sediment traps in streams. Use of non-native materials creates a risk that noxious weeds will be introduced to the area.
- Place absorbent cloth under pumps to avoid spilling fuel on the ground.
- Personnel should avoid using rehabilitated firelines as travel corridors whenever possible because of potential soil compaction and possible detrimental impacts to rehab work, i.e.: water bars.
- Consider using infrared detection devices along perimeter (aerial or hand-held).
- Align saw cuts to minimize visual impacts from more heavily traveled corridors. Slope cut away from line of sight when possible.
-
- In light fuels:
 - Cold-trail areas adjacent to unburned fuels.
 - -Do minimal spading; restrict spading to hot areas near fireline only.
 - -Use extensive cold-trailing to detect hot areas.
- Medium to heavy fuels:
 - Cold-trail charred logs near fireline; do minimal scraping or tool scarring.
 - Minimize bucking of logs to check for hot spots or extinguish fire; preferably roll the logs and extinguish the fire.
 - Return logs to original position after checking or when ground is cool.
 - Refrain from making bone piles; burned and partially burned fuels that were moved should be arranged in natural position as much as possible after they are cold.
 - Consider allowing larger logs near the fireline to burn out, instead of bucking them into manageable lengths. Use a lever or pry bar to move large logs.
 - Aerial fuels, brush, small trees, and limbs:
 - Remove or limb only those fuels which, if ignited, have the potential to spread fire outside the fireline
- Burning trees and snags:
 - First consideration is to allow burning trees or snags to burn themselves out or down. Ensure adequate safety measures are communicated.

- Identify hazard trees with an observer, flagging, and/or glow-sticks.
- If burning trees/snags pose serious threat of spreading fire brands, consider attempting to extinguish fire with water or dirt. Felling chainsaw should be last means, consider falling by blasting, if available.

Appendix G

Rehabilitation of Wilderness Fire Suppression Activities

The major goal of wildfire rehabilitation is to mitigate or eliminate environmental resource impacts caused by the fire suppression effort and rehab the area to as natural conditions as possible. BLM policy emphasizes the need to rehabilitate areas disturbed during the fire suppression effort to as natural an appearance as possible.

This goal coincides with the intentions of the Wilderness Act, which states: “...wilderness is an area affected primarily by nature, with human activity substantially unnoticeable...” In the case of wildfire suppression, it is the human involvement that has the potential to be the damaging effect on the wilderness resource, even more so than the effects of the fire.

Major areas to consider in rehab of fire suppression activities are firelines, helispots, camps, staging areas and any actions taken related to the fire suppression effort.

Following are examples of the actions that may be used for the rehabilitation of fire suppression activities for each area or type of location.

Constructed Fireline Rehabilitation

The following are examples of actions that may be utilized in rehabilitation of constructed firelines:

- After fire spread is secured, replace dug-out soil/duff; obliterate any berms and leave as natural appearing.
- Provide some means for drainage to prevent erosion on firelines or trails created on sloped areas, i.e., shadow-depth water bars, or natural material to act as sediment dams.
- Scatter some cut brush/limbs onto fireline or impacted areas so it blends with the natural appearing landscape.
- Scatter obvious, excess accumulations of cut limbs/seedlings/saplings into a more natural arrangement.
- If excessive amounts of cut vegetation exist, consider piling and burning at a later date.
- Flush cut stumps of felled trees and snags with the ground surface; scatter cut portion out of sight.
- Camouflage cut stumps in a manner that blends with surrounding natural landscape.
- Use a variety of means to camouflage cut faces of stumps and bolewood (rocks, dead woody material, fragments of stumps, bolewood and/or limbs, soil, and fallen/broken green branches)
If need be, bring in some of the natural material you will use to camouflage cut faces of stumps and boles from adjacent untouched areas.
- Piece together cut sections of down logs to appear natural, if possible. Place soil or some existing debris over where the cut was made.
- Position cut logs where they will be least noticeable to wilderness visitors.

- If bolewood can be moved, place cut end adjacent to or underneath existing down material.
- For large size bolewood that cannot be moved, place a slant cut (45-60 degree angle) on the bottom side.
- Do not lop and scatter tops of cut trees. (Lop and scatter could create a harvest/precommercial thin appearance instead of a natural landscape)
- If there has been an excessive amount of bucking, limbing and topping, consider slinging rounds and tops from the site.
- Remove all plastic flagging and trash along the fireline.

Natural Barrier Firelines

Natural or man-made breaks in vegetation, such as water ways, hiking trails, rocky outcrops, talus and scree slopes, and roads, are preferred when possible for use as barriers to contain a fire. These barriers may be effective as is (unimproved) or they may need “improvement”. It is the “improved” barriers that need rehabilitation due to the activities required to widen the barrier. The degree of improvement determines the amount of rehab.

Water Ways: Limbs and logs thrown into a stream during line construction and constructed water impoundments can alter the water flow. Any alteration in water flow should be corrected.

- Remove all woody material (brush, branches & logs) that were thrown into the water during the fire.
- Remove dams, sumps and other human interventions.
- Retrieve flagging and remove all litter, tools, etc.

Hiking Trails: When hiking trails are employed as firelines they may have been widened by the cutting or limbing trees that line the trail. The following are examples of actions that may be utilized in rehabilitation of hiking trail firelines:

- Flush cut conspicuous stumps and camouflage the ends with soil and vegetation.
- Place all cut limbs & seedlings alongside trail, near their source if possible, with the cut ends facing away from the trail.
- Camouflage or block entrances to access trails and switchback short cuts. Switchback shortcuts need to be rehabilitated according to their level of impact, and may require following the guidelines for firelines.
- Retrieve flagging and remove all litter, tools, etc.

Rocky Outcrops, Talus or Scree Slopes: These natural firebreaks are rarely improved upon. If vegetation was removed, no rehab to replace the vegetation is necessary. Most of the impact seen in these areas will be in the form of trenches for fire access trails.

- If necessary, restore slope contour by raking slope material back into fireline until flush.
- Retrieve flagging and remove all litter, tools, etc.

Fire Access Trails: Trails created by foot traffic along hose lines and firelines, accessing pump sites and areas of the fire. Treatments differ for access trails in burned areas versus vegetated areas.

- 1) Through Fire:** Access trails that travel through the fire usually need attention in preventing further erosion and further use. The following are examples of actions that may be utilized in rehabilitation of access trails created through the fire area:
 - Restore slope contour by raking in nearby fill to a level equal to adjacent soil level.
 - Drag available burned logs and brush across the “trail” every 50 ft.
 - If slope is >25 degrees, drainage dips should be added every 20 feet, or where natural features on the land dictate them most useful i.e. where they provide the most drainage, (where the trail changes direction).
 - Camouflage beginning of access trail so visitors will not be tempted to travel on it.

- 2) Through Vegetation:** An access trail through vegetation is rehabilitated as if it were a fireline, but because the level of impact is not normally as severe; the amount of work required is less intensive. Usually, slope and soil loss are observed, as well as compaction of the soil. The degree of rehabilitation required is determined by the amount of impact observed.
 - If soil is compacted, scarify the area lightly without killing any vegetation.
 - Replace recoverable soil and rocks that were displaced during use of access trail, trying to keep soil horizons correct.
 - Restore slope contour, compensating for settling.
 - Scrape back litter.
 - Drag available burned logs. Drag available burned logs and brush across the “trail”.
 - If access trail is deeper than 4 inches and slope is very steep: consider following the rehabilitation standards for constructed fireline.

Special Areas

Special areas receive unusual, intermittent, unregulated, and/or extreme use. These special areas include: helispot sites, “coyote” camps, helispots, pump sites, spike camps, and staging areas. Although the extent of impact to these areas may vary, the same type of impact often occurs throughout.

Helispots: Helispot construction in Wilderness can cause a double impact—the impact of abrupt or unnatural appearing openings in a timber vegetative covered landscape, and the impact resulting from cut-faces of tree boles and stumps. Many of the same type of impacts associated with fireline construction can occur during helispot construction and operation, therefore many of the techniques listed above under constructed firelines can be used. Some other potential actions include:

- If excessive amounts of cut vegetation exist, pile and arrange to be burned at later date, or consider slinging cut material from the site.
- Obliterate landing pad and leave in as natural condition as possible: bury painted helispot markers, remove litter, clean up any area where oil or fuel spills occur, and break up compacted soil.

Camp Situations and Personal Conduct:

- Scatter campfire site rocks and charcoal; cover charred fire ring rocks with soil if necessary.
- Scatter any cut limbs or saplings that may have occurred.
- Cover latrine sites.
- Remove camp/tent poles and stakes and scatter in nearby timbered area.
- Pick up litter and pack out as garbage.

Staging Areas, Etc.:

In some wildfire situations, a fire camp, staging areas, drop-off points, and other miscellaneous constructed facilities are within the Wilderness. These all will be assessed for possible rehab needs, and measures taken accordingly to ensure the area is left in as natural appearing condition as possible.

Spike Camps:

Groups of firefighters can stress the resource as they live and work out of spike camps for an extended period of time. Areas of possible impact include sleeping sites, mess area, first aid station, sanitation sites, equipment caches, and vehicle parking. At these specific spots and throughout the area potential impacts includes compacted soil, bare ground, litter, oil/fuel spills, disturbed slope as in leveled sleeping areas, human refuse/toilet paper, kitchen refuse (sump holes), campfire pits, cut seedlings and limbs, social trails between various living areas, and primitive constructions such as nails in trees, hooches, etc.

Coyote Camps:

Coyote camps are temporary firefighter camps located throughout the fire. Although these camps are not used for any length of time, they can exhibit impacts which may need rehab work. The main impacts include: litter, compacted soil, bare ground, leveled sleeping sites, human refuse/toilet paper, campfire pits, cut seedlings and limbed trees.

Pump Sites:

The operation of a portable water pump impact both the ground on which the pump is resting and to the required water supply. Impacts may include: oil/fuel spills, water pollution, compacted soil, bare ground, dammed and altered streambeds, erosion from overflowing portable water tanks, and litter.

Land Stewardship with Fire Suppression

Suppression impacts and resource damage that may have a level of acceptance on nonwilderness lands may not conform to the “Limits of Acceptable Changes” for wilderness. The appreciation of the need of minimum impact and damage to wilderness resources should occur in initial actions to suppress fire and be incorporated in on-going decisions of suppression actions throughout the incident. The consequence will be a lessening in the need for extensive and costly rehabilitation actions.

Soda Mountain Wilderness Designated Trail System

- The final plan reduces the number of trails heads from four to two, allowing for designated trail heads at Hobart Bluff on Soda Mountain Road and at the old quarry on Pilot Rock Road leading to Pilot Rock.
- Two roads to trails conversions are planned; one at the former Pilot Road from the quarry parking lot to the Pacific Crest Trail as well as a trail conversion utilizing part of the old Schoheim Road, creating a loop trail that ties into the Pacific Crest Trail. The plan also allows for a reroute of the Pilot Rock Trail from the PCT up to Pilot Rock to address erosion and safety concerns.

Map 2. Designated Trails to be Converted from Former Vehicle Routes and Designated Trailheads

