

APPENDIX 19—WILDLAND FIRE RESOURCE PROTECTION MEASURES AND REASONABLE AND PRUDENT MEASURES, TERMS AND CONDITIONS, AND REPORTING REQUIREMENTS IDENTIFIED THROUGH SECTION 7 CONSULTATION

The existing land use plans that comprise Alternative N (no action alternative) were amended September 26, 2005, with the *Finding of No Significant Impact and Decision Record (UT-USO-04-01) Utah Land Use Plan Amendment for Fire and Fuels Management*. The decisions from that document have been brought forward in their entirety. A majority of the decisions are located in the Management Common to All Alternatives section of the Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS) Chapter 2 under the Wildland Fire Ecology heading. This appendix contains the remainder of the decisions, in the form of resource protection measures and terms and conditions identified through Section 7 consultation, that were too long to be easily integrated into Chapter 2 of the PRMP/FEIS.

RESOURCE PROTECTION MEASURES IDENTIFIED IN THE UTAH LAND USE PLAN AMENDMENT FOR FIRE AND FUELS MANAGEMENT

| Applicable Fire Management Practices: | | |
|--|------------------------------|---|
| SUP: Wildfire Suppression | RX: Prescribed Fire | ESR: Emergency Stabilization and Rehabilitation |
| WFU: Wildland Fire Use for Resource Benefit | NF: Non-Fire Fuel Treatments | |
| Air | | |
| A-1 Evaluate weather conditions, including wind speed and atmospheric stability, to predict impacts from smoke from prescribed fires and wildland fire use. Coordinate with Utah Department of Environmental Quality for prescribed fires and wildland fire use. (RX, WFU) | | |
| A-2 When using chemical fuels reduction methods, follow all label requirements for herbicide application. (NF) | | |
| Soil and Water | | |
| SW-1 Avoid heavy equipment use on highly erosive soils (soils with low soil loss tolerance), wet or boggy soils and slopes greater than 30%, unless otherwise analyzed and allowed under appropriate National Environmental Policy Act (NEPA) evaluation with implementation of additional erosion control and other soil protection mitigation measures. (SUP, WFU, RX, NF, ESR) | | |
| SW-2 There may be situations where high intensity fire will occur on sensitive and erosive soil types during wildland fire, wildland fire use or prescribed fire. If significant areas of soil show evidence of high severity fire, evaluate the area for soil erosion potential and downstream values at risk and implement appropriate or necessary soil stabilization actions such as mulching or seeding to avoid excessive wind and water erosion. (SUP, WFU, RX) | | |
| SW-3 Complete necessary rehabilitation on firelines or other areas of direct soil disturbance, including but not limited to waterbarring firelines, covering and mulching firelines with slash, tilling and/or subsoiling compacted areas, scarification of vehicle tracks, off-highway vehicles (OHV) closures, seeding and/or mulching for erosion protection. (SUP, WFU, RX) | | |
| SW-4 When using mechanical fuels reduction treatments, limit tractor and heavy equipment use to periods of low soil moisture to reduce the risk of soil compaction. If this is not practical, evaluate sites, post treatment and if necessary, implement appropriate remediation, such as subsoiling, as part of the operation. (NF) | | |
| SW-5 Treatments such as chaining, plowing, and roller chopping shall be conducted as much as practical on the contour to reduce soil erosion (BLM ROD 13 Western States Vegetation Treatment EIS 1991). (NF, ESR) | | |

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| SW-6 When using chemical fuel reduction treatments follow all label directions, additional mitigations identified in project NEPA evaluation and the Approved Pesticide Use Proposal. At a minimum, provide a 100-foot-wide riparian buffer strip for aerial application, 25 feet for vehicle application and 10 feet for hand application. Any deviations must be in accordance with the label. Herbicides would be applied to individual plants within 10 feet of water where application is critical (BLM ROD 13 Western States Vegetation Treatment EIS 1991). (NF) | | |
| SW-7 Avoid heavy equipment in riparian or wetland areas. During fire suppression or wildland fire use, consult a resource advisor before using heavy equipment in riparian or wetland areas. (SUP, WFU, RX, NF, ESR) | | |
| SW-8 Limit ignition within native riparian or wetland areas. Allow low-intensity fire to burn into riparian areas. (RX) | | |
| SW-9 Suppress wildfires consistently with compliance strategies for restoring or maintaining the restoration of water quality impaired [303(d) listed] water bodies. Do not use retardant within 300 feet of water bodies. (SUP, WFU) | | |
| SW-10 Plan and implement projects consistent with compliance strategies for restoring or maintaining the restoration of water quality impaired [303(d) listed] water bodies. Planned activities shall take into account the potential impacts on water quality, including increased water yields that can threaten fisheries and aquatic habitat; improvements at channel crossings; channel stability; and downstream values. Of special concern are small headwaters of moderate to steep watersheds; erosive or saline soils; multiple channel crossings; at-risk fisheries; and downstream residents. (RX, NF, ESR) | | |
| Vegetation | | |
| V-1 When restoring or rehabilitating disturbed rangelands, non-intrusive, nonnative plant species are appropriate for use when native species: (1) are not available; (2) are not economically feasible; (3) cannot achieve ecological objectives as well as nonnative species; and/or (4) cannot compete with already established native species (Noxious Weeds Executive Order 13112 2/3/1999; BLM Manual 9015; BLM ROD 13 Western States Vegetation Treatment EIS 1991). (RX, NF, ESR) | | |
| V-2 In areas known to have weed infestations, aggressive action will be taken in rehabilitating firelines, seeding and follow-up monitoring and treatment to reduce the spread of noxious weeds. Monitor burned areas and treat as necessary. All seed used will be tested for purity and for noxious weeds. Seed with noxious weeds will be rejected (ROD 13 Western States Vegetation Treatment EIS 1991). (SUP, WFU, RX, NF, ESR) | | |
| Special Status Species | | |
| SSS-1 Initiate emergency Section 7 consultation with United States Fish and Wildlife Service (USFWS) upon the determination that wildfire suppression may pose a potential threat to any listed threatened or endangered species or adverse modification of designated critical habitat. (SUP) | | |
| SSS-3 Prior to planned fire management actions, survey for listed threatened and endangered and non-listed sensitive species. Initiate Section 7 consultation with USFWS as necessary if proposed project may affect any listed species. Review appropriate management, conservation and recovery plans and include recovery plan direction into project proposals. For non-listed special status plant and animal species, follow the direction contained in the BLM 6840 Manual. Ensure that any proposed project conserves non-listed sensitive species and their habitats and ensure that any action authorized, funded or carried out by the Bureau of Land Management (BLM) does not contribute to the need for any species to become listed. (RX, NF, ESR) | | |
| SSS-4 Follow terms and conditions identified in the Biological Opinion (see section below). (SUP, WFU, RX, NF, ESR) | | |
| Fish and Wildlife | | |
| FW-1 Avoid treatments during nesting, fawning, spawning, or other critical periods for wildlife or fish. (RX, NF, ESR) | | |
| FW-2 Avoid if possible or limit the size of, wildland fires in important wildlife habitats such as, mule deer winter range, riparian and occupied Greater sage-grouse habitat. Use resource advisors to help prioritize resources and develop Wildland Fire Situation Analyses and Wildland Fire Implementation Plans when important habitats may be impacted. (SUP, WFU) | | |

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| FW-3 Minimize wildfire size and frequency in sagebrush communities where sage-grouse habitat objectives will not be met if a fire occurs. Prioritize wildfire suppression in sagebrush habitat with an understory of invasive, annual species. Retain unburned islands and patches of sagebrush unless there are compelling safety, private property and resource protection or control objectives at risk. Minimize burn-out operations (to minimize burned acres) in occupied sage-grouse habitats when there are no threats to human life and/or important resources. (SUP) | | |
| FW-4 Establish fuel treatment projects at strategic locations to minimize size of wildfires and to limit further loss of sagebrush. Fuel treatments may include greenstripping to help reduce the spread of wildfires into sagebrush communities. (RX, NF) | | |
| FW-5 Use wildland fire to meet wildlife objectives. Evaluate impacts to sage-grouse habitat in areas where wildland fire use for resource benefit may be implemented. (WFU, RX) | | |
| FW-6 Create small openings in continuous or dense sagebrush (>30% canopy cover) to create a mosaic of multiple-age classes and associated understory diversity across the landscape to benefit sagebrush-dependent species. (WFU, RX, NF) | | |
| FW-7 On sites that are currently occupied by forests or woodlands, but historically supported sagebrush communities, implement treatments (fire, cutting, chaining, seeding etc.) to re-establish sagebrush communities. (RX, NF) | | |
| FW-8 Evaluate and monitor burned areas and continue management restrictions until the recovering and/or seeded plant community reflect the desired condition. (SUP, WFU, RX, ESR) | | |
| FW-9 Utilize the Emergency Stabilization and Rehabilitation (ESR) program to apply appropriate post-fire treatments within crucial wildlife habitats, including sage-grouse habitats. Minimize seeding with non-native species that may create a continuous perennial grass cover and restrict establishment of native vegetation. Seed mixtures shall be designed to re-establish important seasonal habitat components for sage-grouse. Leks shall not be re-seeded with plants that change the vegetation height previously found on the lek. Forbs shall be stressed in early and late brood-rearing habitats. In situations of limited funds for ESR actions, prioritize rehabilitation of sage grouse habitats. (ESR) | | |
| Wild Horses and Burros | | |
| WHB-1 Avoid fencing that would restrict access to water. (RX, NF, ESR)" | | |
| Cultural Resources | | |
| CR-1 Cultural resource advisors shall be contacted when fires occur in areas containing sensitive cultural resources. (SUP) | | |
| CR-2 Wildland fire use is discouraged in areas containing sensitive cultural resources. A programmatic agreement is being prepared to cover the finding of adverse effects to cultural resources associated with wildland fire use. (WFU) | | |
| CR-3 Potential impacts of proposed treatment shall be evaluated for compliance with the National Historic Preservation Act (NHPA) and the Utah Statewide Protocol. This shall be conducted prior to the proposed treatment. (RX, NF, ESR) | | |
| Paleontology | | |
| P-1 Planned projects shall be consistent with BLM Manual and Handbook H-8270-1, Chapter III (A) and III (B) to avoid areas where significant fossils are known or predicted to occur or to provide for other mitigation of possible adverse effects.(RX, NF, ESR) | | |
| P-2 In the event that paleontological resources are discovered in the course of surface fire management activities, including fires suppression, efforts shall be made to protect these resources. (SUP, WFU, RX, NF, ESR) | | |
| Forestry | | |
| F-1 Planned projects shall be consistent with Healthy Forest Restoration Act Section 102(e) (2) to maintain or contribute to the restoration of old-growth stands to a pre-fire suppression condition and to retain large trees contributing to old growth structure. (SUP, WFU, RX, NF) | | |

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| F-2 During planning, evaluate opportunities to utilize forest and woodland products prior to implementing prescribed fire activities. Include opportunities to use forest and woodland product sales to accomplish non-fire fuel treatments. In forest and woodland stands, consider developing silvicultural prescriptions concurrently with fuel treatments prescriptions. (RX, NF) | | |
| Livestock Grazing | | |
| LG-1 Coordinate with permittees regarding the requirements for non-use or rest of treated areas. (SUP, WFU, RX, NF, ESR) | | |
| LG-2 Rangelands that have been burned, by wildfire, prescribed fire or wildland fire use, will be ungrazed for a minimum of one complete growing season following the burn. (SUP, WFU, RX) | | |
| LG-3 Rangelands that have been re-seeded or otherwise treated to alter vegetative composition, chemically or mechanically, will be ungrazed for a minimum of two complete growing seasons. (RX, NF, ESR) | | |
| Recreation and Visitor Services | | |
| Rec-1 Wildland fire suppression efforts will preferentially protect Special Recreation Management Areas and recreation site infrastructure in line with fire management goals and objectives. (SUP) | | |
| Rec-2 Vehicle tracks created off established routes will be obliterated after fire management actions in order to reduce unauthorized OHV travel. (SUP, WFU, RX, NF, ESR) | | |
| Lands and Realty | | |
| LR-1 Fire management practices will be designed to avoid or otherwise ensure the protection of authorized rights-of-way and other facilities located on the public lands, including coordination with holders of major rights-of-way systems within rights-of-way corridors and communication sites. (WFU, RX, NF, ESR) | | |
| LR-2 Fire management actions must not destroy, deface, change or remove to another place any monument or witness tree of the Public Land Survey System. (SUP, WFU, RX, NF, ESR) | | |
| Hazardous Waste | | |
| HW-1 Recognize hazardous wastes and move fire personnel to a safe distance from dumped chemicals, unexploded ordnance, drug labs, wire burn sites or any other hazardous wastes. Immediately notify BLM Field Office hazmat coordinator or state hazmat coordinator upon discovery of any hazardous materials, following the BLM hazardous materials contingency plan. (SUP, WFU, RX, NF, ESR) | | |
| Mineral Resources | | |
| M-1 A safety buffer shall be maintained between fire management activities and at-risk facilities. (SUP, WFU, RX) | | |
| Wilderness and Wilderness Study Areas | | |
| Wild-1 The use of earth-moving equipment must be authorized by the field office manager. (SUP, WFU, RX, ESR) | | |
| Wild-2 Fire management actions will rely on the most effective methods of suppression that are least damaging to wilderness values, other resources and the environment, while requiring the least expenditure of public funds.(SUP, WFU) | | |
| Wild-3 A resource advisor shall be consulted when fire occurs in Wilderness Areas and Wilderness Study Areas (WSA). (SUP, WFU) | | |

U. S. FISH AND WILDLIFE SERVICE INCIDENTAL TAKE STATEMENT, INCLUDING REASONABLE AND PRUDENT MEASURES, TERMS AND CONDITIONS, AND REPORTING REQUIREMENTS FOR ESA SPECIES OF THE BIOLOGICAL OPINION

The USFWS has completed a biological opinion on the Proposed Action alternative and terms and conditions have been identified as part of that opinion. Together, the resource protection measures and the terms and conditions were incorporated into the Proposed Action to reduce resource conflicts. Species that were addressed in the complete statement contained in the *Finding of No Significant Impact and Decision Record (UT-USO-04-01) Utah Land Use Plan Amendment for Fire and Fuels Management* that do not occur within the decision area or are not affected by management in the EIS alternatives are not include in the Incidental Take Statement below.

Incidental Take Statement

Section 9 of the Act, as amended, prohibits take (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct) of listed species of fish or wildlife without a special exemption. “Harm” is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering (50 CFR § 173). “Harass” is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering (50 CFR § 17.3).

No exemption from Section 9 of the Act is granted in this biological opinion. The Bureau of Land Management’s (BLM) implementation of the Land Use Plan Amendment and Five Fire Management Plans is likely to adversely affect listed species. The likelihood of incidental take, and the identification of reasonable and prudent measures and terms and conditions to minimize such take, will be addressed in project-level, and possibly programmatic-level consultations. Any incidental take and measures to reduce such take cannot be effectively identified at the level of proposed action because of the uncertainty of wildland fire, broad geographic scope, and the lack of site-specific information. Rather, incidental take and reasonable and prudent measures may be identified adequately through subsequent actions subject to Section 7 consultations at the project and/or programmatic scale.

Even though actual take levels are unquantifiable, take will occur through harm and harassment. Therefore, we are providing the following Reasonable and Prudent Measures (RPMs) and terms and conditions to minimize overall take. Implementation of these RPMs and terms and conditions during project planning will also expedite site-specific Section 7 consultation.

Reasonable and Prudent Measures

The USFWS believes that the following RPMs are necessary and appropriate to minimize impacts of incidental take of Utah prairie dog, southwestern willow flycatcher, California condor, bald eagle, Mexican spotted owl, and Siler pincushion cactus:

1. The BLM shall implement measures to minimize mortality or injury of federally listed species due to proposed project activities without placing firefighter personnel at risk. The species that were determined to be “**likely to adversely affected**” by project activities included: Utah prairie dog, southwestern willow flycatcher, California condor, bald eagle, Mexican spotted owl, and Siler pincushion cactus.
2. The BLM shall implement measures to minimize harm to federally listed species through destruction of their suitable or designated critical habitats, without placing firefighter personnel at

risk. The species' habitats that were determined to be "**likely to adversely affected**" by project activities included: Utah prairie dog, southwestern willow flycatcher, California condor, bald eagle, Mexican spotted owl, and Siler pincushion cactus.

Terms and Conditions

In order to be exempt from the prohibitions of Section 9 of the Act, the BLM must comply with the following terms and conditions, which implement the RPMs described above and outline required reporting/monitoring requirements. These terms and conditions are non-discretionary. The following terms and conditions apply to all species covered under this biological opinion, and are to be implemented in addition to the Applicant Committed Measures described in the Proposed Action:

General Terms and Condition

1. To implement Reasonable and Prudent Measure 1:
 - a. Before the beginning of each fire season, a threatened and endangered species education program will be presented to all personnel anticipated to be within federally listed species habitats during suppression activities. This program will contain information concerning the biology and distribution of listed species throughout the Fire Management Plan Planning Area, their legal status, fire suppression goals and restrictions within suitable and critical habitat. Following training, each individual will sign a completion sheet to be placed on file at the local BLM office.
 - b. All project employees (including fire fighting personnel) shall be informed as to the definition of "take", the potential penalties (up to \$200,000 in fines and one year in prison) for taking a species listed under the Endangered Species Act, and the terms and conditions provided in this biological opinion.
 - c. A qualified resource advisor will be assigned to each wildfire that occurs in or threatens listed species habitat. The resource advisor's role is help define goals and objectives for fire suppression efforts and informs the Incident Commander (IC) of any restrictions, but does not get involved in specific suppression tactics. Resource advisors shall oversee fire suppression and suppression rehabilitation activities; to ensure protective measures endorsed by the Incident Commander are implemented.
 - d. For pre-planned projects, the Authorized Officer shall designate an individual as a contact representative who will be responsible for overseeing compliance with the Applicant Committed Measures and terms and conditions contained in this biological opinion, and providing coordination with the USFWS. The representative will have the authority to halt activities which may be in violation of these conditions, unless human health and safety or structures are at risk.
 - e. Project-related personnel shall not be permitted to have pets accompany them to the project site.
 - f. If available, maps shall be provided to local dispatch centers showing general locations of listed species. Local BLM or Utah Division of Wildlife Resources (UDWR) biologists shall be consulted for specific locations if fires occur within or near the general locations delineated on the map.
 - g. In occupied habitat, pre- and post-monitoring of federally listed species' responses to the pre-planned treatments will be conducted.
2. To implement Reasonable and Prudent Measure 2:
 - a. Fingers or patches of unburned vegetation within burned areas shall not be burned out as a fire suppression measure unless required for safety concerns or due to high reburn potential.

- b. Emergency stabilization and rehabilitation efforts must focus on areas where there is a potential of non-native species to spread, particularly within suitable habitat for federally listed species.
- c. The specific seed mix and areas to be seeded within suitable habitat for federally listed and sensitive species will be determined through coordination and Section 7 consultation with the USFWS.
- d. In occupied habitat burned by wildland fire, the recovery of vegetation shall be monitored, including establishment and monitoring of paired plots, inside and outside of the burned area unless the BLM and the USFWS concur that monitoring is not required.
- e. Site-specific projects under the Land Use Plan Amendment and Fire Management Plans will maintain, protect, or enhance the primary constituent elements of designated critical habitat in all implementation activities.
- f. The effectiveness of suppression activities and threatened and endangered species conservation measures shall be evaluated after a fire in coordination with the USFWS. Procedures shall be revised as needed.
- g. In occupied habitat, pre- and post-monitoring of federally listed species' habitat responses to the pre-planned treatments will be conducted.
- h. Temporarily close burned areas to off highway vehicles (OHV) within occupied habitat after a wildland fire event until vegetation and soils recover. Consultation with the USFWS may determine that an area may remain open if there is no threat to the species or habitat.
- i. Consult with the USFWS to determine the need to obscure decommissioned trails and roads and illegal OHV trails within occupied habitat after a wildland fire event to prevent the trails and roads from re-opening.

Utah Prairie Dog

The following terms and conditions are in addition to the general terms and conditions listed above and apply to the Utah prairie dog:

1. To implement Reasonable and Prudent Measures 1 and 2:
 - a. Wildfires will be suppressed before they reach a prairie dog colony ("prairie dog colony" refers to any occupied Utah prairie dog colony) or after they exit a colony. Active suppression efforts will not occur within a colony unless human health and safety or structures are at risk.
 - b. Only hand lines will be authorized within colonies.
 - c. Normally, only water shall be used on fires that occur within prairie dog colonies. If the fire Incident Commander decides that the situation requires use of chemical retardants in order to protect life and property, they may be used. The chemical composition will be supplied to the USFWS during emergency consultation.
 - d. All vehicles shall stay on existing roads within colonies, except as stated in (e). Storage of equipment and materials shall not occur within 0.25 mile of colonies. Vehicle maintenance shall not occur within these areas.
 - e. The resource advisor, biologist, or biological monitor (someone who is either qualified with a biological background or has been trained by the resource advisor) ensures that prairie dogs and their burrows are protected or avoided by walking in front of engines, tracked vehicles, or other firefighting-related vehicles within occupied prairie dog colonies.
 - f. Vehicles shall not exceed a speed of 10 miles per hour (cross country) in occupied Utah prairie dog colonies unless a higher speed is determined to be prudent for safety reasons.
 - g. Within colonies, precautions shall be taken to ensure that contamination of the site by fuels, motor oils, grease, etc. does not occur and that such materials are contained and properly disposed of off site. Inadvertent spills of petroleum-based or other toxic materials shall be

cleaned up and removed immediately, unless during an emergency event (wildfire suppression). In which case the spill shall be cleaned up as soon as practical after the emergency situation is controlled.

- h. Camps associated with fire suppression activities shall be situated outside occupied habitat.
- i. If a dead or injured Utah prairie dog is located, initial notification must be made to the USFWS Division of Law Enforcement, Cedar City, Utah at telephone 435-865-0861 or to the Cedar City office of the UDWR at telephone number 435-865-6100. Instruction for proper handling and disposition of such specimens will be issued by the Division of Law Enforcement. Care must be taken in handling sick or injured animals to ensure effective treatment and care and in handling dead specimens to preserve biological material in the best possible state.

Southwestern Willow Flycatcher

The following terms and conditions are in addition to the general terms and conditions listed above and apply to the southwestern willow flycatcher:

1. To implement the Reasonable and Prudent Measure 1:
 - a. Prior to planned project activities, potentially affected habitat will be surveyed according to USFWS protocol (*A Southwestern Willow Flycatcher Natural History Summary and Survey Protocol; Technical Report NPS/NAUCPRS/NRTR-97/12*).
 - b. Except where fires are active in occupied habitat, minimize unnecessary low-level helicopter flights during the breeding season (April 1–September 30). If safety allows, approach bucket dip sites at a 90-degree direction to rivers to minimize flight time over the river corridor and occupied riparian habitats. Locate landing sites for helicopters at least 0.25 mile from occupied flycatcher habitat unless human safety or property dictates otherwise.
 - c. Minimize use of chainsaws or bulldozers to construct firelines through occupied or suitable habitat except where necessary to reduce the overall acreage of occupied habitat or other important habitat areas that would otherwise be burned.
 - d. Implement activities to reduce hazardous fuels or improve riparian habitats (prescribed burning or vegetation treatments) within occupied or unsurveyed suitable habitat for southwestern willow flycatchers only during the non-breeding season (October 1 to March 31).
2. To implement Reasonable and Prudent Measure 2:
 - a. Riparian fuel reduction actions shall be considered as experimental, and initially conducted only in unoccupied habitats until the success and ramifications are better understood. Efficacy of these actions as a fire management tool, and effects on bird habitat quality, shall be tested in a scientifically explicit, controlled fashion (Appendix L in U.S. Fish and Wildlife Service 2002).
 - b. In occupied or suitable flycatcher habitat, creation of firebreaks might render the habitat unsuitable (Appendix L in U.S. Fish and Wildlife Service 2002). As long as human safety and property allows, firebreaks shall be conducted in unoccupied sites, outside of proposed critical habitat, or within proposed critical habitat under the following situations:
 - i. The habitat does not meet the Primary Constituent Elements of the proposed critical habitat as listed in 69 FR 60706-60786, October 12, 2004;
 - ii. Minimal fireline necessary to prevent unacceptable losses of occupied habitat; and
 - iii. Between fuel concentrations and flycatcher breeding sites to prevent fires from spreading into breeding sites (Appendix L in U.S. Fish and Wildlife Service 2002).

- c. Prescribed fire shall be avoided in occupied habitat and considered only as experimental management techniques if dealing with suitable unoccupied habitat (Appendix L in U.S. Fish and Wildlife Service 2002).
- d. Fires in occupied habitat and adjacent buffer zones shall be rapidly suppressed if safety allows.

California Condor and Bald Eagle

The following terms and conditions are in addition to the general terms and conditions listed above and apply to the California condor and bald eagle:

1. To implement the Reasonable and Prudent Measure 1:
 - a. If California condors or bald eagles are found inhabiting (nesting) within the action area of a pre-planned project, a buffer of 1 mile surrounding the nesting area will be designated as non-treatment zones (Romin and Muck 2002).
 - b. If California condors are observed within 0.25 mile of an open water source, such as an inflatable storage tank or “pumpkin,” the water storage tank will be covered when not in use.

Mexican Spotted Owl

The following terms and conditions are in addition to the general terms and conditions listed above and apply to the Mexican spotted owl:

1. To implement Reasonable and Prudent Measure 1:
 - a. Pre-planned fuels reduction projects within Mexican spotted owl designated critical habitat shall be designed to enhance habitat requirements for the Mexican spotted owl as well as for the valuable prey species they rely upon.
2. To implement Reasonable and Prudent Measure 2:
 - a. Fire suppression shall be considered for wildfires in designated critical habitat.

Threatened or Endangered Plants

The following terms and conditions are in addition to the general terms and conditions listed above and apply to the federally listed plants:

1. To implement Reasonable and Prudent Measure 1:
 - a. Do not allow wildland fire use within occupied habitat unless agreed to by the BLM and the USFWS.
 - b. When feasible (human life or property are not at risk) firebreaks shall be constructed down slope of plants and populations; if firebreaks must be sited upslope, buffers of 100 feet minimum between surface disturbances and plants and populations will be incorporated.
2. To implement Reasonable and Prudent Measure 2:
 - a. Do not allow wildland fire use within occupied habitat unless agreed to by the BLM and the USFWS.
 - b. For pre-planned projects within known or potential habitat, site inventories shall be conducted to determine habitat suitability prior to initiation of project activities, at a time when the plant can be detected.
 - c. For riparian/wetland-associated species, avoid loss or disturbance of riparian habitats.
 - d. Limit disturbances to and within suitable habitat by staying on designated routes where feasible.

- e. Limit new access routes created by the project.
- f. Following a wildland fire event, place signing to limit ATV travel in sensitive burned areas.

Siler Pincushion Cactus

The following terms and conditions are in addition to the general terms and conditions listed above as well as the terms and conditions for threatened and endangered plant species. These terms and conditions apply specifically to the Siler pincushion cactus:

1. To implement Reasonable and Prudent Measures 1 and 2:
 - a. Follow and implement the restrictions to pesticide use within suitable Siler pincushion cactus habitat developed by the Environmental Protection Agency (EPA). These limitations were excerpted from the EPA's Pesticides: Endangered Species Protection Program (<http://www.epa.gov/oppfead1/endanger/arizona/cocon.htm#brady>):
 - i. If the active ingredient is 2,4-D (all forms), ATRAZINE, CLOPYRALID, DICAMBA (all forms), DICHLORPROP (2,4-DP), HEXAZINONE, MCPA (all forms), PARAQUAT, PICLORAM (all forms), or TEBUTHIURON, then do not apply this pesticide in the species habitat. For ground applications do not apply within 20 yards of the habitat, or within 100 yards for aerial applications.
 - ii. If the active ingredient is OXYFLUORFEN (granular or non-granular), then do not apply this pesticide in the species habitat. For ground applications do not apply within 100 yards of the habitat, or within ¼ mile for aerial applications.
 - iii. If the active ingredient is either METRIBUZIN or SULFOMETURON METHYL, then do not apply this pesticide on rights-of-way in the species habitat.

Closing

The USFWS believes that an unquantifiable amount of incidental take will occur in the form of harm and harassment as a result of the proposed actions. The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize the impact of incidental take that might otherwise result from the proposed actions. The BLM must immediately provide an explanation of the causes of the taking and review with the USFWS the need for possible modification of the reasonable and prudent measures.

Reporting Requirements

Upon locating dead, injured, or sick listed species, immediate notification must be made to the USFWS Salt Lake City Field Office at (801) 975-3330 and the USFWS Division of Law Enforcement, Ogden, Utah, at (801) 625-5570. Pertinent information including the date, time, location, and possible cause of injury or mortality of each species shall be recorded and provided to the USFWS. Instructions for proper care, handling, transport, and disposition of such specimens will be issued by the USFWS Division of Law Enforcement. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state.

The BLM shall submit a report to the USFWS on or before (December 1) of each year in which fire management activities occurred within occupied habitat. For the listed and candidate species covered under this consultation, the report shall include: 1) the amount of potential and/or occupied habitat affected by wildfire (i.e. stream miles burned, percentage of drainage burned, fire severity map); 2) to the extent possible, the number of individuals killed from direct and indirect effects of wildfire; 3) any habitat and/or population monitoring efforts from past wildfire events; 4) a copy of the burned area emergency stabilization and rehabilitation plan; 5) implementation and effectiveness monitoring of burned area

emergency stabilization and rehabilitation treatments; 6) implementation and effectiveness monitoring of the standard operating procedures; 7) recommendations for enhancing the effectiveness of the standard operating procedures; and 8) any recommendations for additional standard operating procedures. The first report shall be due to the USFWS on (December 1, 2005). The address for the Utah Fish and Wildlife Office is:

Field Supervisor, U.S. Fish and Wildlife Service
2369 West Orton Circle, Suite 50
West Valley City, Utah 84119
Telephone: (801) 975-3330

ADDITIONAL RESOURCE PROTECTION MEASURES DEVELOPED BY THE BLM AND THE U. S. FISH AND WILDLIFE SERVICE

In addition to the resource protection measures listed in the land use plan amendment, the following conservation measures were developed through the Section 7 consultation process. These resource protection measures were identified in the U.S. Fish and Wildlife Service's Biological Opinion (p. 42). That document states that "the BLM has incorporated these measures...by reference to their [Biological Assessment]." Species that were addressed in these measures that do not occur within the decision area or are not affected by management in the EIS alternatives are not included. Additional resource protection measures are as follows:

- Manage natural and prescribed fire regimes to protect or improve Utah prairie dog habitat.
- Within Utah prairie dog habitat, reseeded would be implemented according to the Utah Prairie Dog Recovery Plan.
- Manage prescribed fire and wildland fire use within Mexican spotted owl Protected Activity Centers (PAC) to ensure protection of nesting, roosting, and foraging habitats.
- Wildland fire suppression would be prioritized for use in Mexican spotted owl PACs. When feasible, fire camps associated with suppression efforts would be built outside of the PACs and nest protection areas.
- For treatments within suitable habitat for listed species, pre- and post-monitoring would take place as determined on a case-by-case basis.
- Incorporate the standards and guidelines recommended by the Inland Native Fish Strategy (USFS 1995).
- As per the decision of the resource advisor, avoid construction of firelines using mechanized equipment across the stream channel. If used, the mechanized equipment would terminate at, and not cross, the stream channel.
- Avoid transferring water from one watershed into another for the purpose of water drops, as this could aid in the spread of water-borne diseases such as whirling disease.
- Avoid retardant use in any riparian wetland communities.
- Restricted use of mechanical treatments and hand tools.
- Per-burn acreage limitations of 5-100 acres, as long as human life or property are not threatened.
- Prior to planned fire management actions, survey for listed threatened and endangered and non-listed sensitive species. Review appropriate management, conservation, and recovery plans and include recovery plan direction into project proposals, if listed. Ensure that any proposed project conserves non-listed sensitive species and their habitats and ensure that any action authorized, funded, or carried out by the BLM does not contribute to the need for any species to become listed.

In addition to the Resource Protection Measures listed under the LUP, the Richfield Support Center had instituted the following measures into their FMP.

Measures designed to protect threatened, endangered, or candidate species (plant and animals) include:

- END-4 A Resource Advisor must coordinated with the plant specialist in the Fillmore field office in order to authorize any dozer use. (SUP, WFU0)
- END-5 Contact the Resource Advisor for all fire management activities that may affect the Utah Prairie Dog (SUP, WFU, RX, NF, ESR)
- END-6 Contact the Resource Advisor for all fire management activities that may affect the southwestern willow flycatcher. Manage fires according to the conservation plan. (SUP, WFU, RX, NF, ESR)
- END-7 Protect Mexican spotted owl habitat. Manage fires according to the Mexican spotted owl recovery plan and "Suggestions for the Management of Mexican Spotted Owls." Contact the Resource Advisor for all fire management activities.
- END-8 Suppress all wildland fires in critical sage grouse, prairie dog, or pygmy rabbit habitat. (SUP)
- END-9 Contact the Resource Advisor for fire management activities in Bonneville cutthroat trout or Boreal toad habitat. (SUP, WFU, RX, NF, ESR)